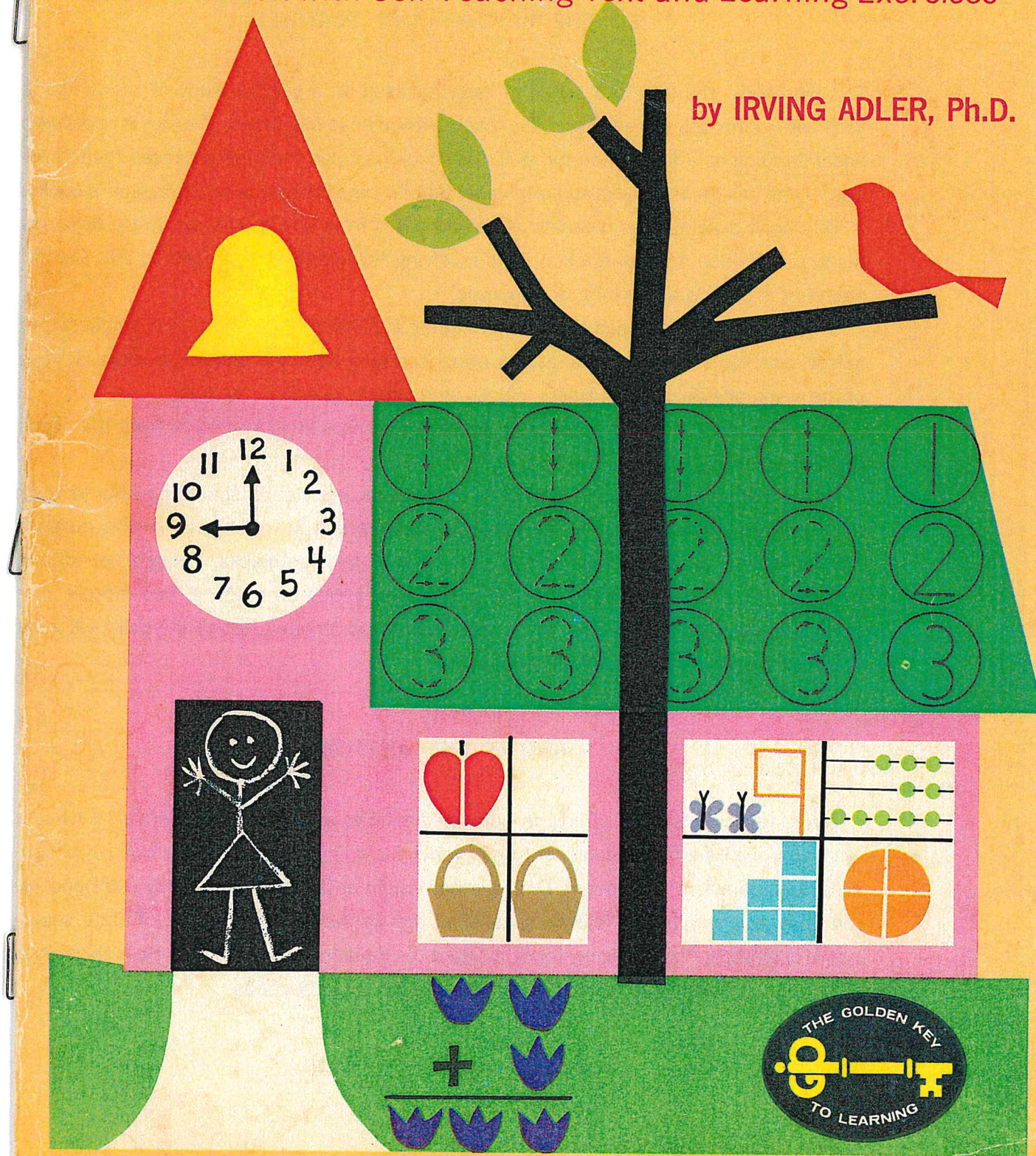


MATHEMATICS-**GRADE 1**

Learning About Numbers

A Workbook with Self-Teaching Text and Learning Exercises

by IRVING ADLER, Ph.D.



TO THE PARENT AND TEACHER

This workbook, the first in a series of six, is based on a careful study of the methods used both in this country and abroad to teach arithmetic to beginners. The aim is to develop understanding as a foundation for skill. The book includes the best practices found anywhere, and has the freshness and originality that is characteristic of all the author's books.

This book develops the meaning of the numbers from one to twelve. It also develops the basic addition and subtraction facts involving the numbers from one to ten. Careful attention is paid to the writing of numerals.

Other ideas are developed here, including big and little, more and fewer, smallest and tallest, coin values, making change, counting, counting by twos, counting backward, days of the week, one dozen, foot rulers, clocks, and simple geometric figures.

Each idea is developed fully. Enough practice exercises are provided to meet the needs of most children.

To strengthen his understanding of number ideas, each child should be able to work with certain objects involved in the workbook exercises. A kit of objects for this purpose should include: a box of crayons, ten pennies, and five toothpicks. Though not strictly necessary, the following would also be helpful: ten beads on a string, two nickels, one dime, ten checkers, ten buttons, and a set of dominoes. In one exercise the child will need two empty quart milk cartons and four cups.

ABOUT THE AUTHOR

Irving Adler received his Ph.D. in pure mathematics at Columbia University. He was a teacher in the New York schools for twenty years, including six years as chairman of a high-school mathematics department. Dr. Adler has taught at Columbia University and Bennington College, and was the keynote speaker at the Washington conference of state supervisors of mathematics, called by the U. S. Office of Education in June, 1961. He is the author of more than thirty books on mathematics, science, and education.

MATHEMATICS—GRADE 1

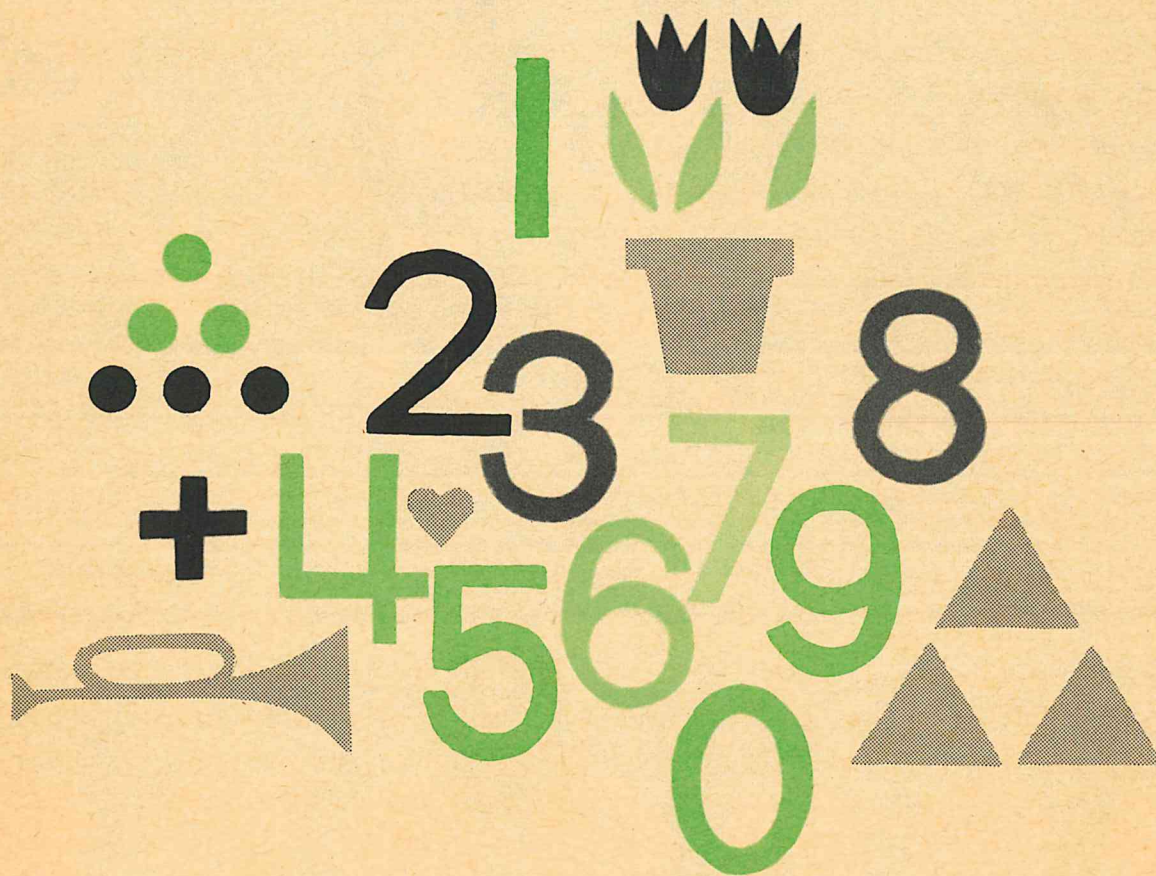
Learning About Numbers

A Workbook with Self-Teaching Text and Learning Exercises

by IRVING ADLER, Ph.D.

*Author of The Giant Golden Book of Mathematics,
The New Mathematics, and Magic House of Numbers*

Illustrated by Dick Martin



GOLDEN PRESS



NEW YORK

Fourth Printing, 1969

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Printed in the U.S.A.

Meaning of One and Two

one



1

This boy is walking alone. There is one boy.

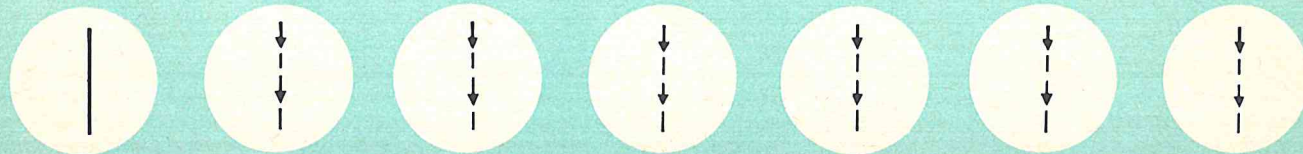
two



2

These girls are walking together. There are two girls.

Write the number in each circle. Follow the arrows.



Write the number in each circle. Follow the arrows.

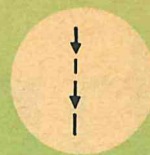
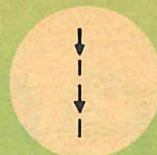
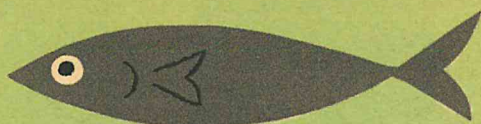


Look at the pictures.

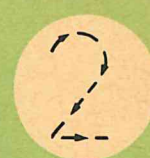
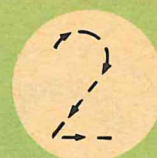
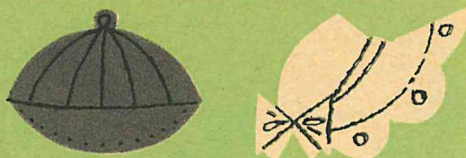
Then write the number in each circle.

Follow the arrows.

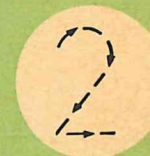
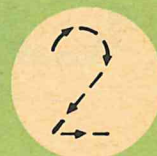
one fish



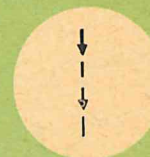
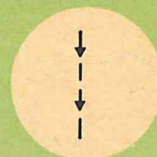
two hats



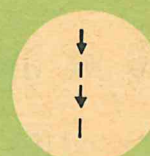
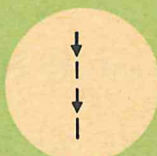
two shoes



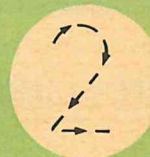
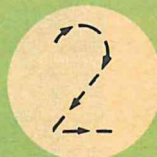
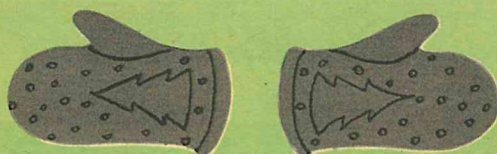
one bat



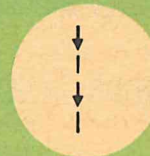
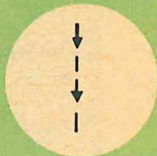
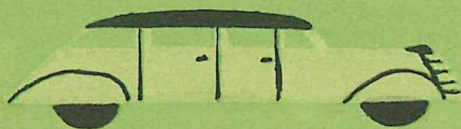
one horn



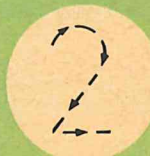
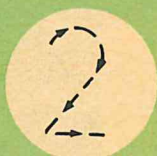
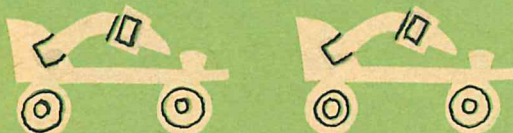
two mittens



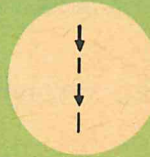
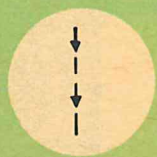
one car



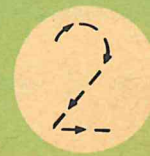
two skates



one cup



two spoons



Meaning of Three

three

3



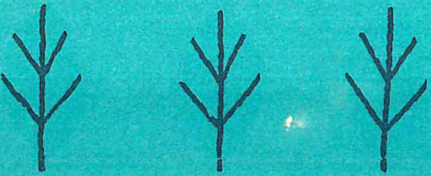
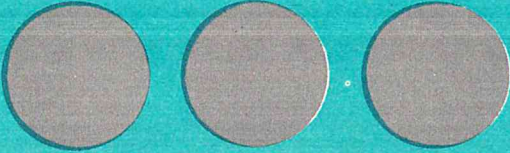
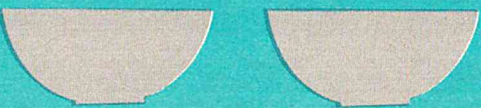
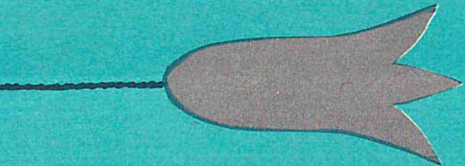
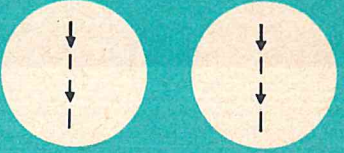
Here are three bears.

Write the number in each circle.



Look at the pictures.

Then write the number in each circle.

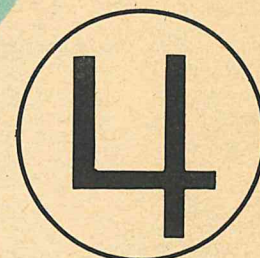
three stars		
three leaves		
three balls		
two bowls		
one flower		

Meaning of Four

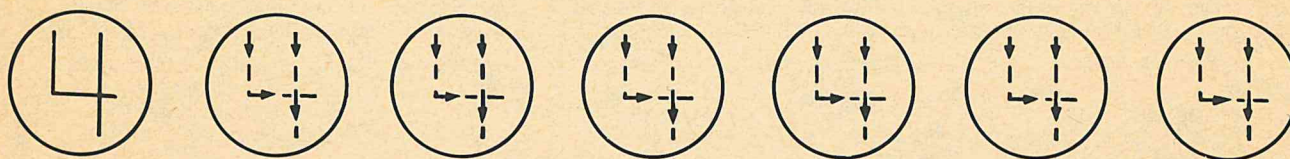


Here are four birds.

four



Write the number in each circle.



Look at the pictures.

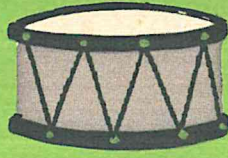
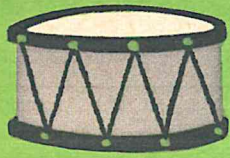
Then write the number in each circle.

four ducks			
four hens			
three rabbits			
two bears			
one skunk			

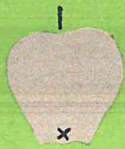
Meaning of One to Four

Look at each picture.

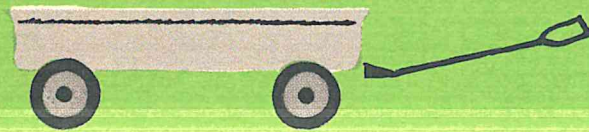
Then draw a circle around the right number.



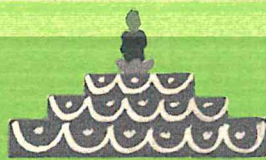
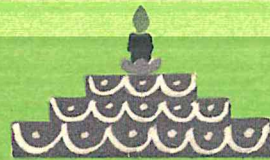
1 2 3 4



1 2 3 4



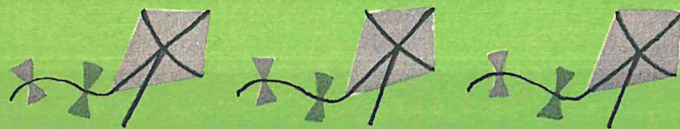
1 2 3 4



1 2 3 4



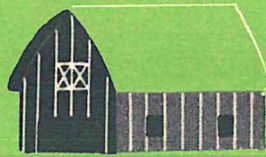
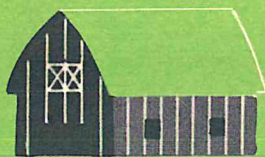
1 2 3 4



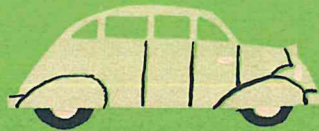
1 2 3 4



1 2 3 4



1 2 3 4



1 2 3 4

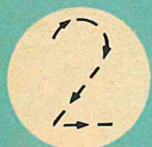
Draw a line from each cat to the bowl under it.



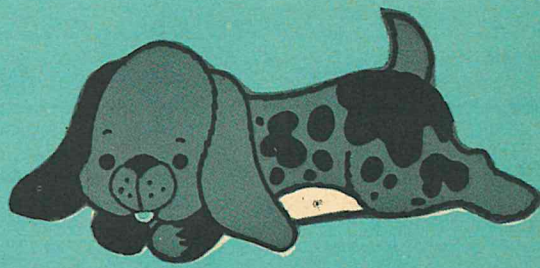
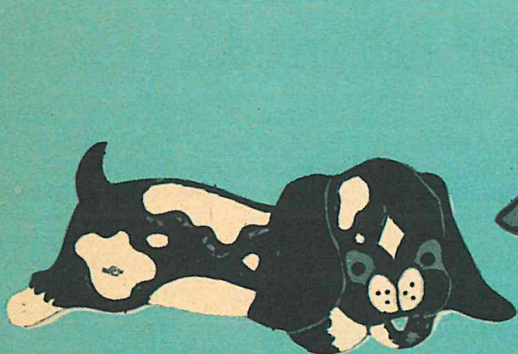
There is a bowl for each cat. There is a cat for each bowl.

There are two cats. There are two bowls.

Write the number 2 in each circle.



Draw a line from each dog to the bone under it.



There is a bone for each dog. There is a dog for each bone.

There are three dogs. There are three bones.

Write the number 3 in each circle.



Draw a line from each bird to the worm under it.

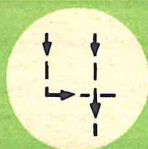


There is a worm for each bird.

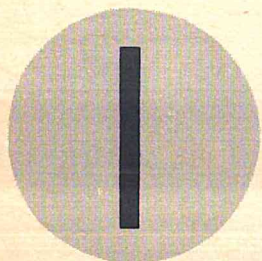
There is a bird for each worm.

There are four birds. There are four worms.

Write the number 4 in each circle.



Circle the right word.



one

two

three

four

Circle the right word.



one

two

three

four

Circle the right word.



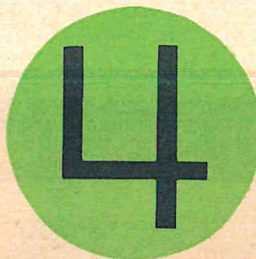
one

two

three

four

Circle the right word.



one

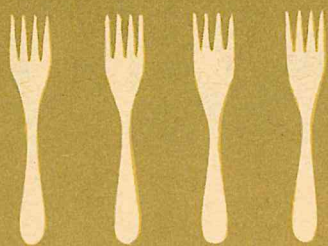
two

three

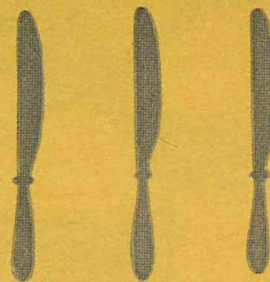
four

Look at each picture.

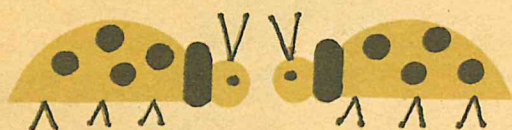
Then write the number in each box.



forks



knives



bugs



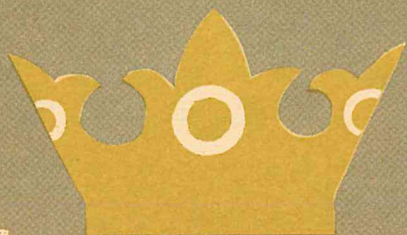
bat



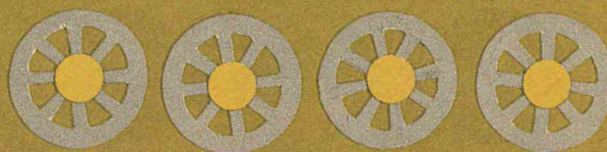
socks



pencils



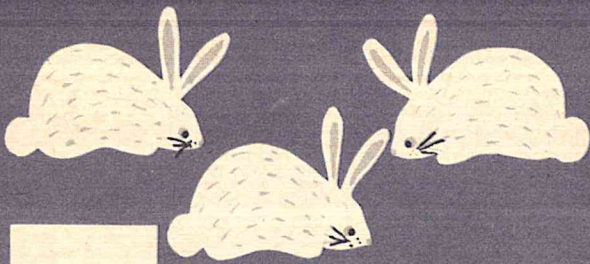
crown



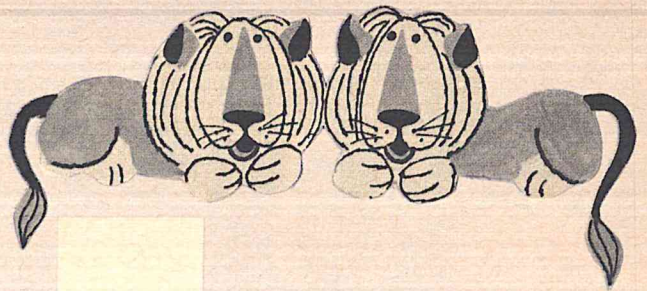
wheels

Look at each picture.

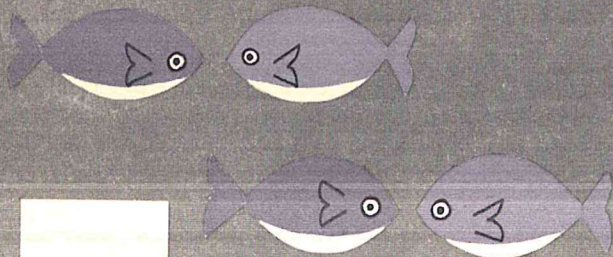
Then write the number in each box.



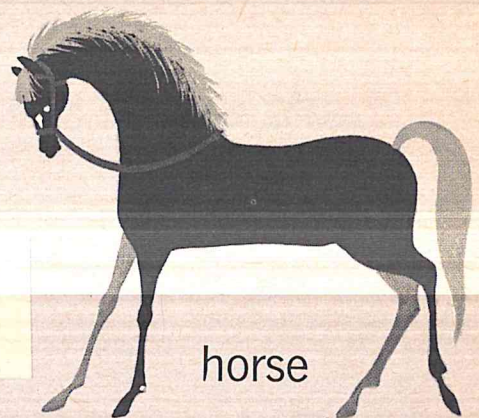
rabbits



lions



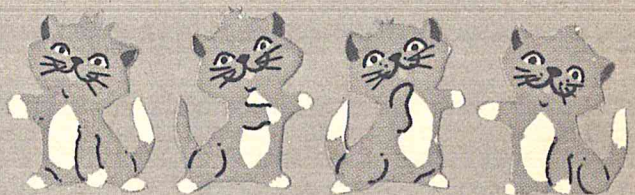
fish



horse



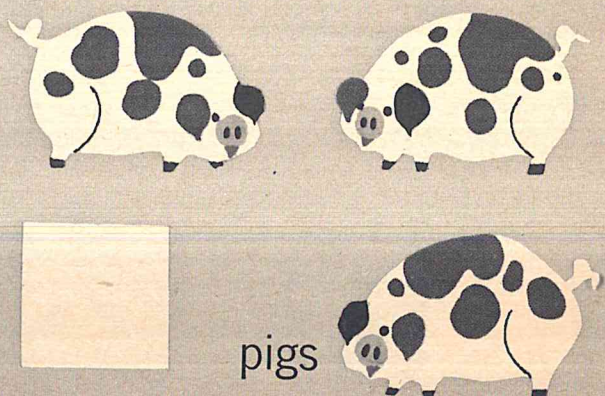
monkeys



kittens



lamb

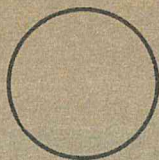


pigs

Figures

This is a circle.

You can cover it
with a penny.



This is a straight line.

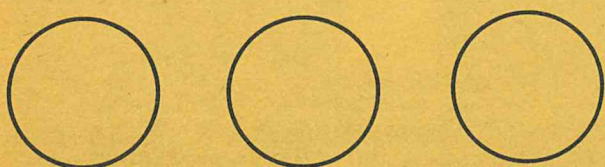


You can cover it
with a toothpick.

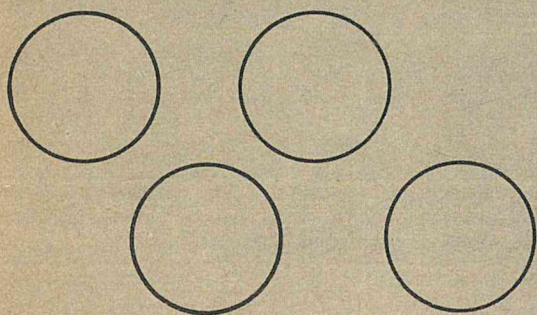
Cover each circle with a penny.

Cover each straight line with a toothpick.

Write in each box the number of pennies or
toothpicks you need each time.



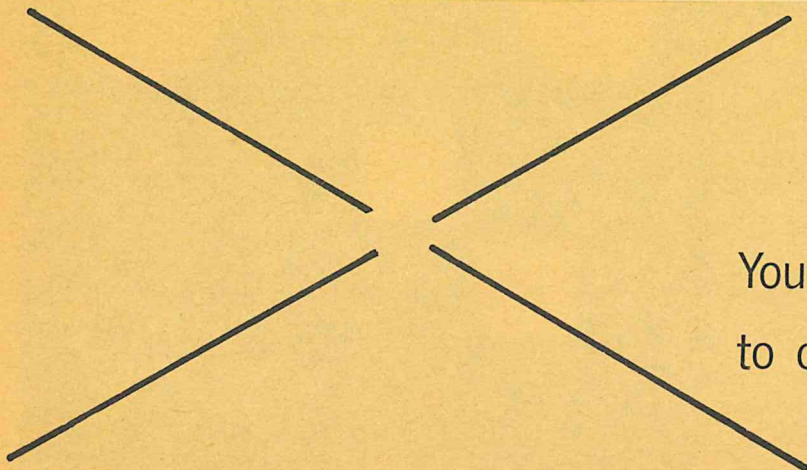
You need pennies
to cover this picture.



You need pennies
to cover this picture.



You need toothpicks
to cover this picture.

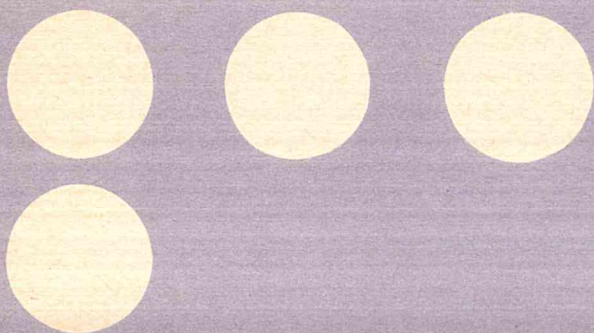


You need toothpicks
to cover this picture.

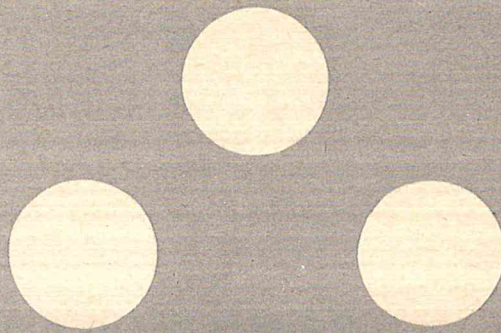
Cover each circle with a penny.

Cover each straight line with a toothpick.

Write the right number in each box.



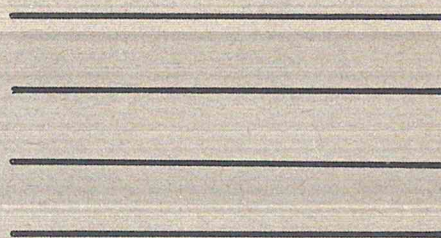
You need pennies
to cover this picture.



You need pennies
to cover this picture.



You need
toothpicks
to cover this picture.



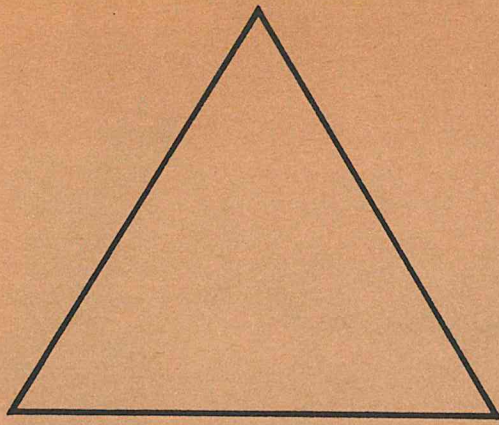
You need
toothpicks
to cover this picture.



You need penny
and toothpick
to cover this picture.



You need pennies
and toothpick
to cover this picture.



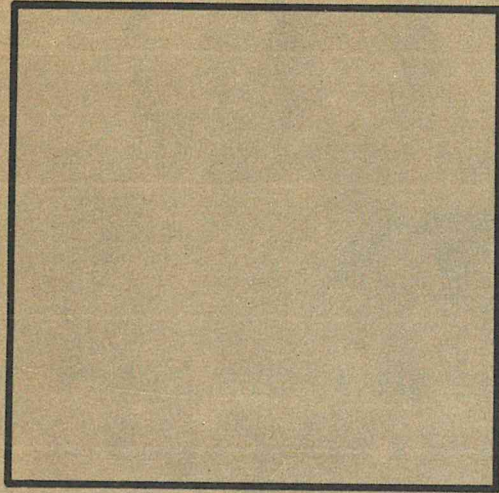
This is a triangle.

Its sides are straight lines.

Cover each side with a toothpick.



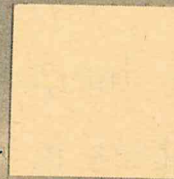
A triangle has _____ sides.



This is a square.

Its sides are straight lines.

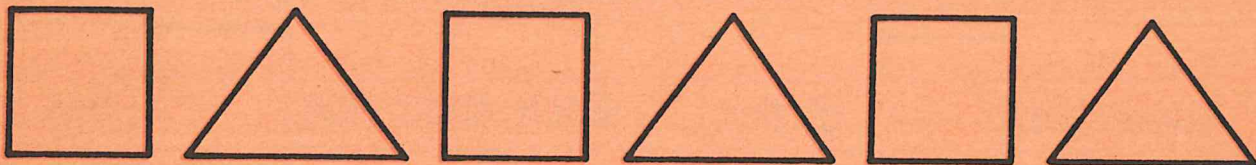
Cover each side with a toothpick.



A square has _____ sides.

How many sides has each figure?

Write the number inside each one.



Draw 3 circles in this space.

Draw 4 squares in this space.

Draw 2 triangles in this space.



Tell how many things of each kind there are in this picture.
Write the numbers in the boxes.

There is stool.

The stool has legs.

There are chairs.

Each chair has legs.

There is table.

The table has legs.

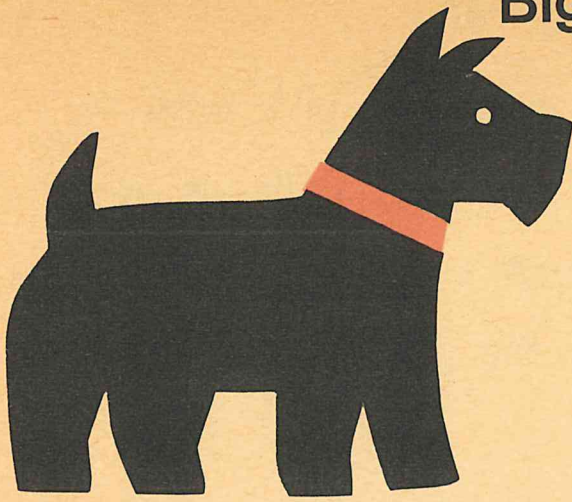
There are forks.

There are knives.

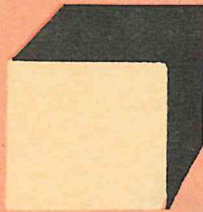
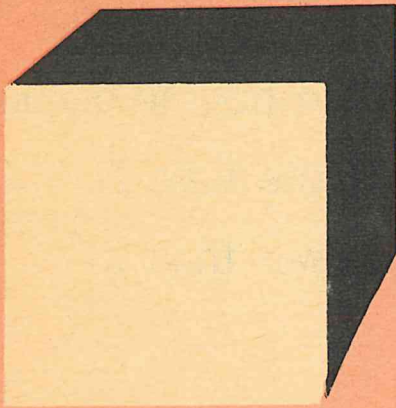
There are spoons.

There are plates.

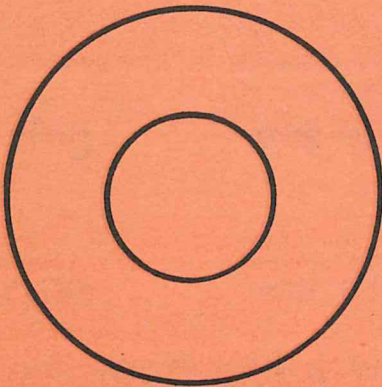
Big and Little



One dog is big.
One dog is little.
Draw a circle
around the little dog.

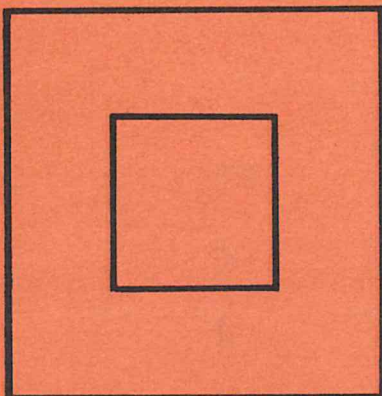


One block is big.
One block is little.
Draw a circle
around the big block.



One circle is inside the other.
One circle is big.
One circle is little.
Draw a line under the right answer.

The inside circle is { big.
little.



One square is inside the other.
One square is big.
One square is little.
Draw a line under the right answer.

The outside square is { little.
big.

More and Fewer



There are 3 girls here.

There are 2 balloons here.

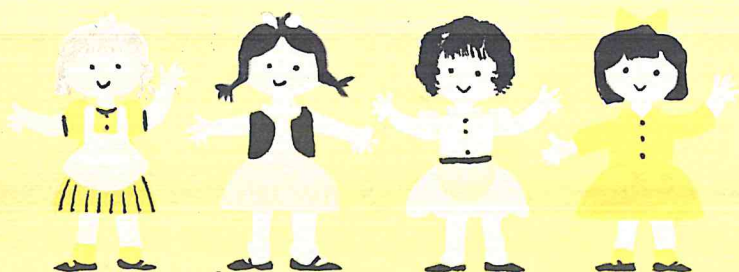
Draw a line from each balloon to the girl above it.



One girl has no balloon.

3 is more than 2.

2 is fewer than 3.



There are girls here.

There are boys here.

Draw a line from each boy to the girl above him.



Circle the right answers.

Does each boy have a partner?

yes

no

Does each girl have a partner?

yes

no

Which number is more?

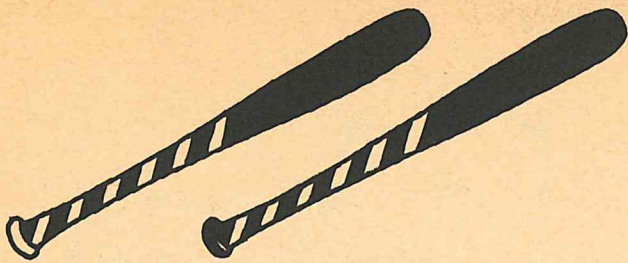
3

4

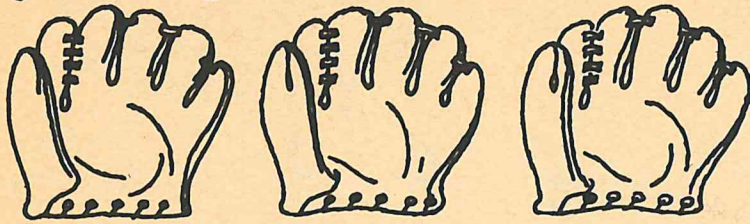
Which number is fewer?

3

4



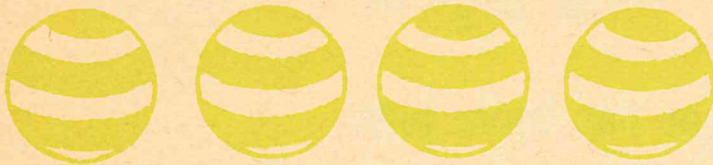
There are 2 bats here.



There are 3 mitts here.

3 is more than 2

2 is fewer than 3



There are balls here.



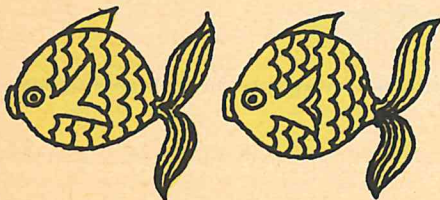
There are stars here.

is more than

is fewer than



There are snails here.



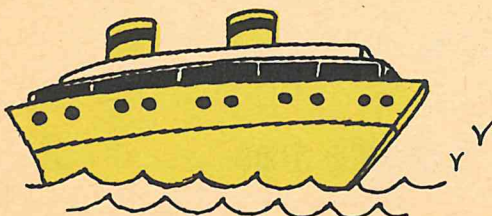
There are fish here.

is more than

is fewer than



There are cars here.

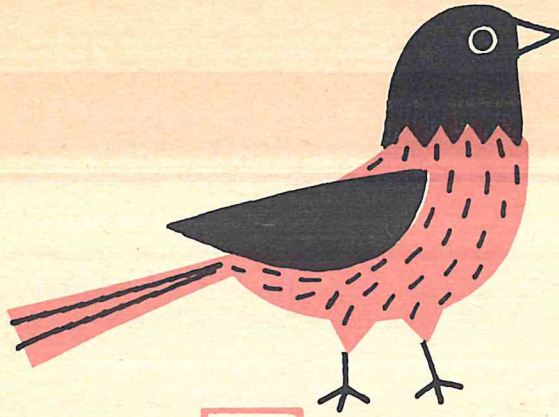


There is ship here.

is more than

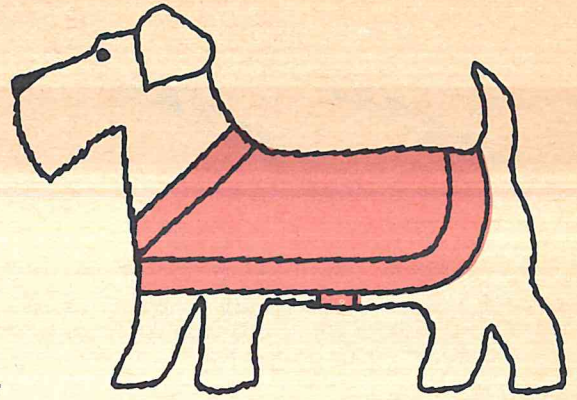
is fewer than

Which Has More?



bird

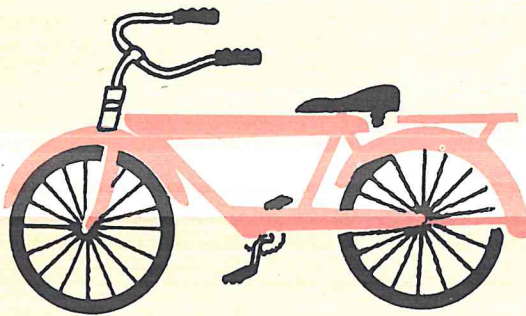
The bird has legs.



dog

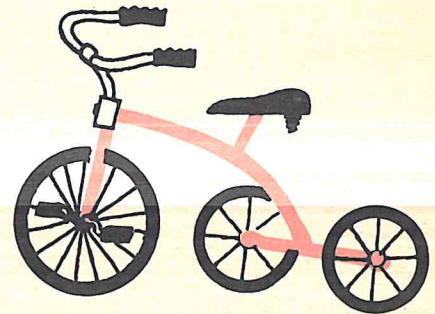
The dog has legs.

Draw a circle around the one that has more legs.



bicycle

The bicycle has wheels.



tricycle

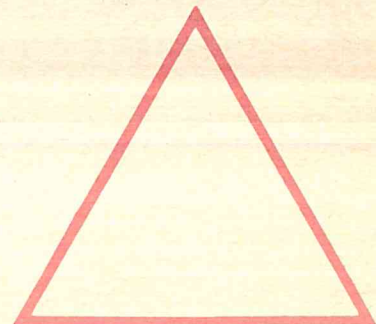
The tricycle has wheels.

Draw a circle around the one that has more wheels.



square

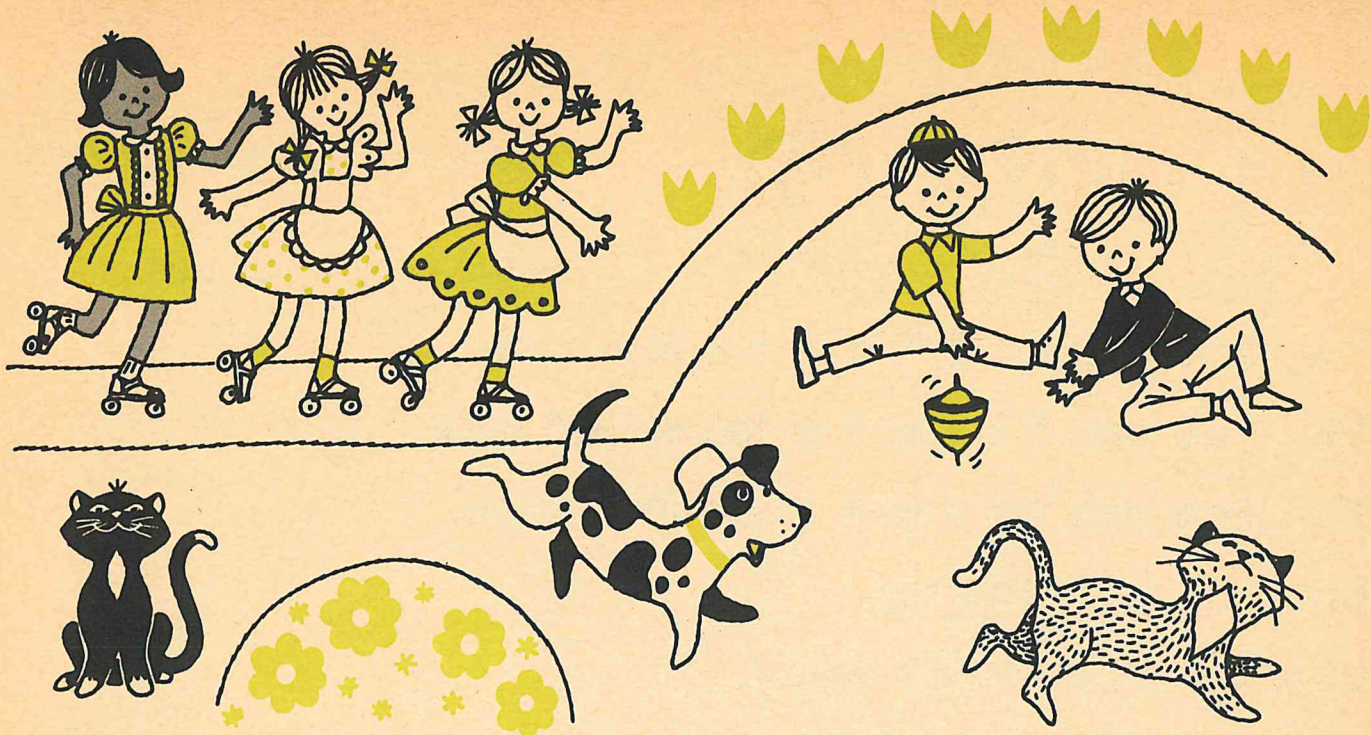
The square has sides.



triangle

The triangle has sides.

Draw a circle around the one that has more sides.



There are girls here.

There are boys here.

There are cats here.

There is dog here.

Circle the right word to answer each question.

Are there more boys or girls?

There are more { boys.
girls.

Are there more cats or dogs?

There are more { cats.
dogs.

Are there more girls or dogs?

There are more { girls.
dogs.

Circle the right numbers on each line.

2 is more than 1 2 3 4

3 is more than 1 2 3 4

4 is more than 1 2 3 4

First Second Third

1

2

3

How many circles are here?

Answer: circles.

The circle with the 1 in it is the **first** circle.

The circle with the 2 in it is the **second** circle.

The circle with the 3 in it is the **third** circle.

Color the first circle red.

Color the second circle yellow.

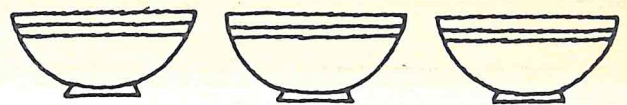
Color the third circle blue.



Color the first house green.

Color the second house red.

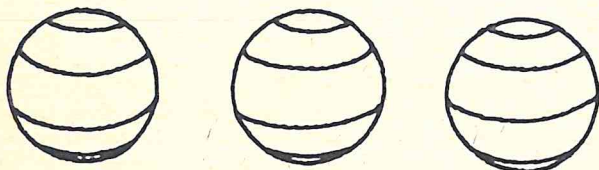
Color the third house yellow.



Color the first bowl orange.

Color the second bowl black.

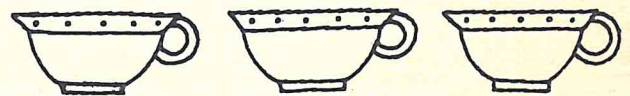
Color the third bowl blue.



Color the first ball brown.

Color the second ball yellow.

Color the third ball purple.



Color the first cup blue.

Color the second cup green.

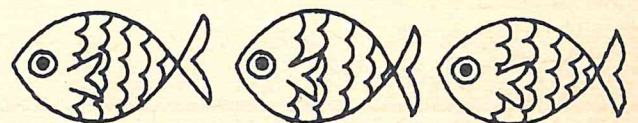
Color the third cup yellow.



Color the first crown red.

Color the second crown yellow.

Color the third crown blue.



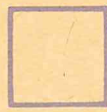
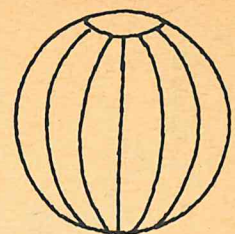
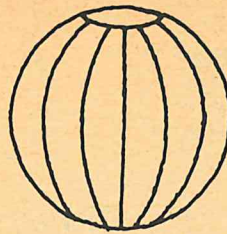
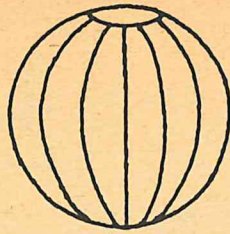
Color the first fish orange.

Color the second fish brown.

Color the third fish purple.

Groups in Three

There are 3 balls here.
Color the first ball red.
Color the rest blue.



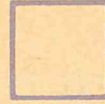
red ball and



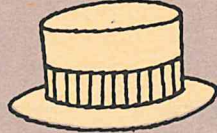
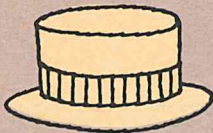
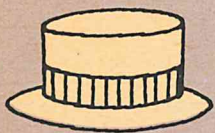
blue balls are 3 balls.



and



are 3.



Color the first two hats green.

Color the rest yellow.



green hats and



yellow hat are 3 hats.

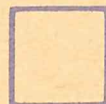
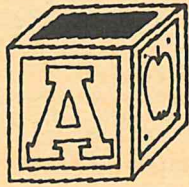
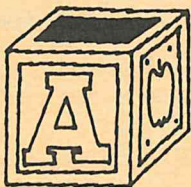
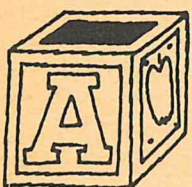


and

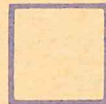


are 3.

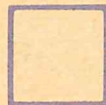
Color the first block red.
Color the second block blue.
Color the third block yellow.



red block and



blue block and



yellow block

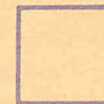
are 3 blocks.



and

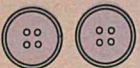


and



are 3.

Write the number story of each picture.



and



are 3.



and



are 3.



and



and



are 3.



and



and



are 3.

Fourth

1

2

3

4

The circle with 4 in it is the **fourth** circle.

Color the first three circles red.

Color the fourth circle blue.

red circles and

blue circle are 4 circles.

and

are 4.



Color the first star orange.

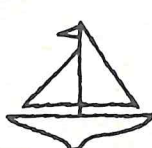
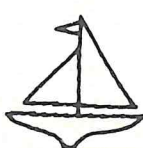
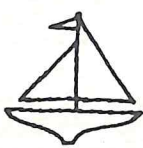
Color the rest black.

orange star and

black stars are 4 stars.

and

are 4.



Color the first two boats red.

Color the rest green.

red boats and

green boats are 4 boats.

and

are 4.

Write the number story of each picture.



and

are 4.



and

are 4.



and

are 4.

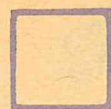


and

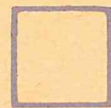
are 4.

Groups in Four

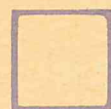
There are girls playing jump rope.



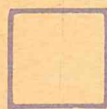
girls are turning the rope.



girl is jumping.



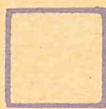
girl is waiting for her turn.



and

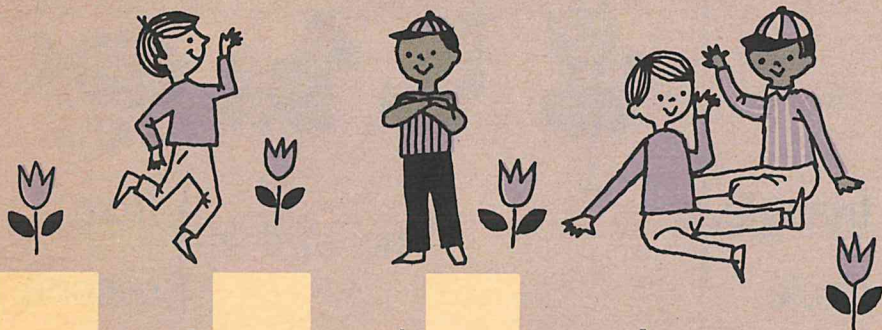


and



are 4.

There are boys here.



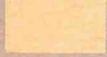
boy is running.



boy is standing.



boys are sitting.



and



and

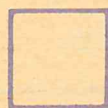


are 4.

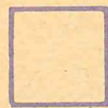
There are puppies here.



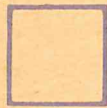
puppy is all white.



puppies have black spots.



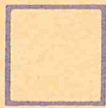
puppy is all black.



and



and



are 4.

Write the number story of each picture.



and



and



are 4.



and



and



are 4.



and



and



are 4.



and



and



are 4.

First

Second

Third

Fourth

Circle the correct word.



1



2



3



4

The first car is { brown.
black.

The second car is { white.
brown.

The fourth car is { brown.
black.



1



2



3



4

The first checker is { black.
white.

The second checker is { brown.
white.

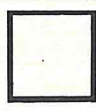
The third checker is { black.
white.



1



2



3



4

The first figure is a { triangle.
circle.

The second figure is a { triangle.
square.

The fourth figure is a { square.
line.



1



2



3



4

The bird is { first.
second.

The dog is { third.
fourth.

The fish is { second.
fourth.



The first picture is a { house.
tree.

The second picture is a { boat.
tree.

The fourth picture is a { car.
boat.

A

B

C

D

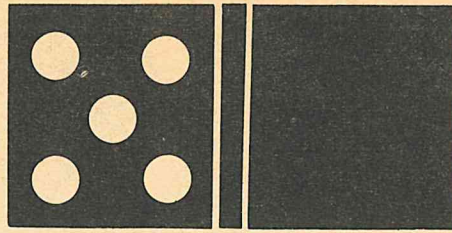
The first letter is { A.
C.

The second letter is { B.
D.

The third letter is { C.
D.

Meaning of Five

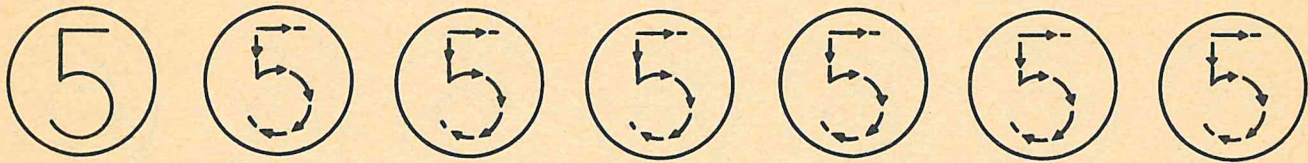
five



5

There are five dots on this domino.

Write the number in each circle. Follow the arrows.



Look at the pictures.

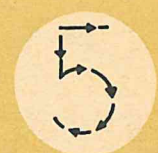
Then write the number in each circle.



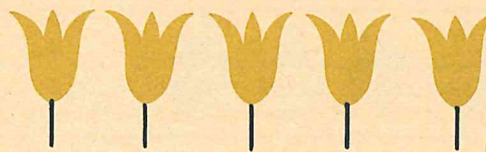
five apples



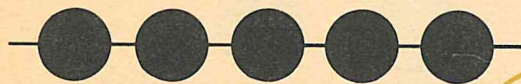
five cherries



five candles



five tulips



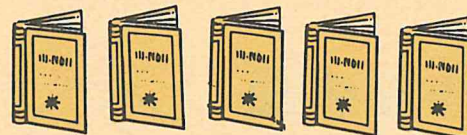
five beads



five checkers



five stars

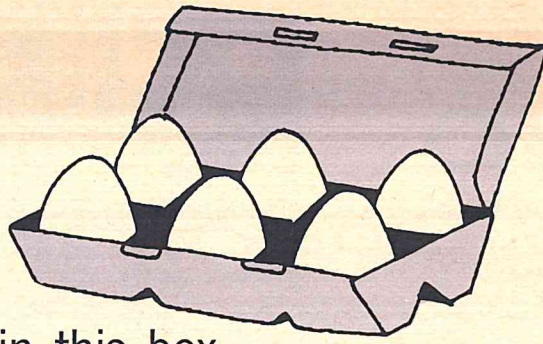


five books



Meaning of Six

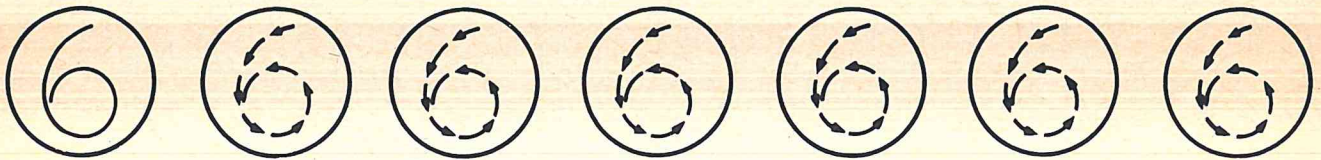
six



6

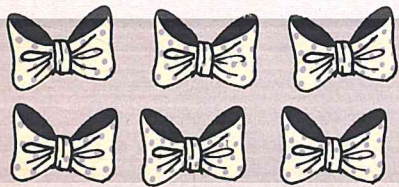
There are six eggs in this box.

Write the number in each circle. Follow the arrows.

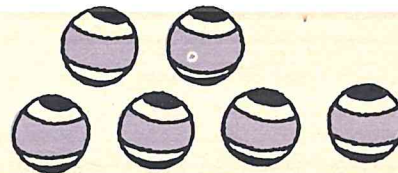


Look at the pictures.

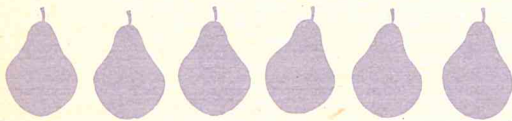
Then write the number in each circle.



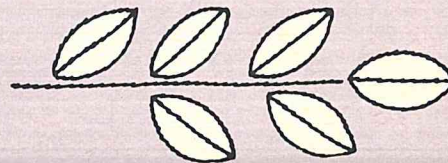
six bows



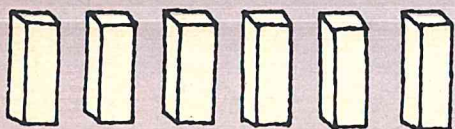
six balls



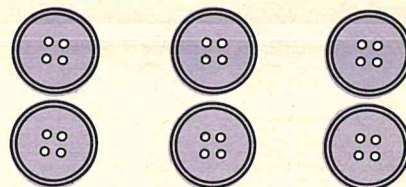
six pears



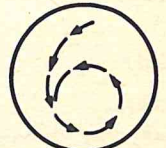
six leaves



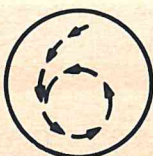
six blocks



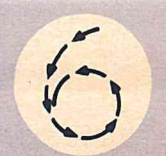
six buttons



six beads



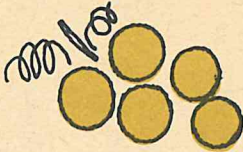
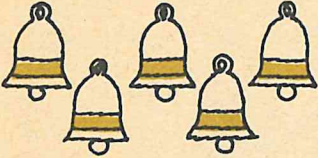
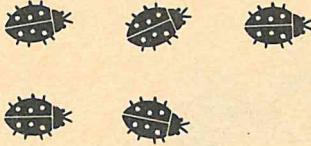
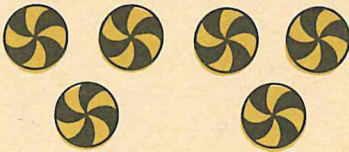
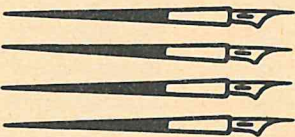
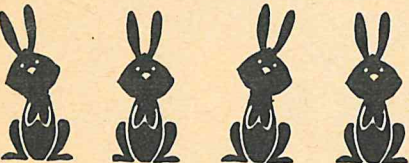
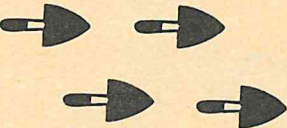
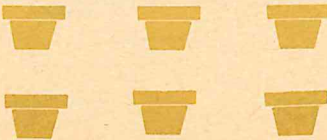
six pencils



Meaning of Four to Six

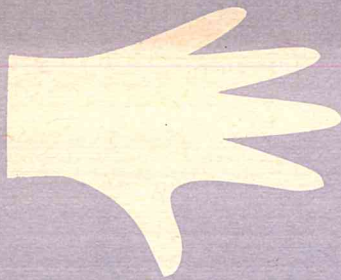
Look at the things in each group and tell how many there are.

Draw a circle around the right number.

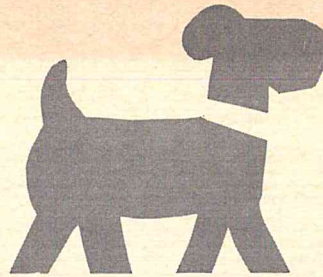
	4 5 6		4 5 6
	4 5 6		4 5 6
	4 5 6		4 5 6
	4 5 6		4 5 6
	4 5 6		4 5 6
	4 5 6		4 5 6
	4 5 6		4 5 6
	4 5 6		4 5 6
	4 5 6		4 5 6

Look at the pictures.

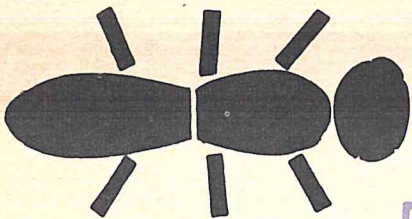
Then write the answers.



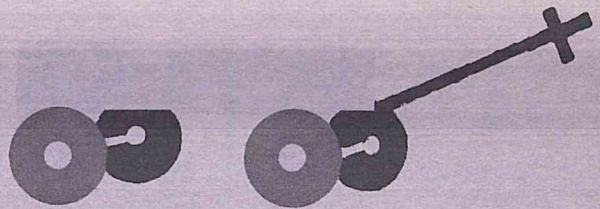
A hand has 5 fingers.



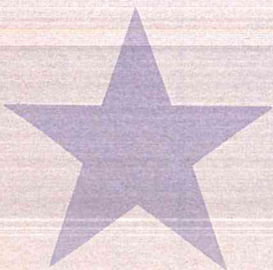
A dog has legs.



An ant has legs.



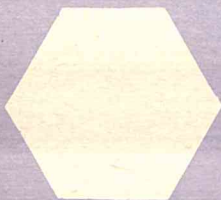
A wagon has wheels.



This star has points.



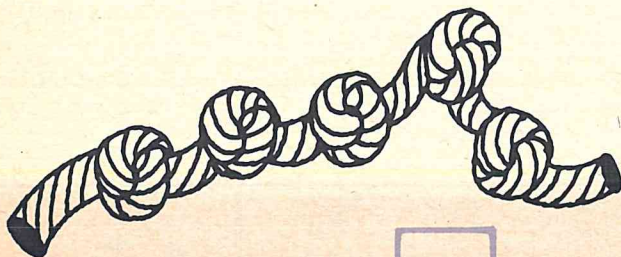
This star has points.



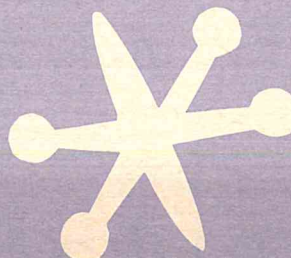
This tile has sides.



This leaf has points.

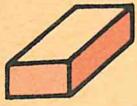


This rope has knots.

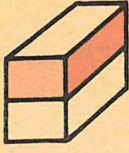


A jack has arms.

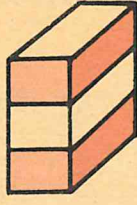
Fifth Sixth



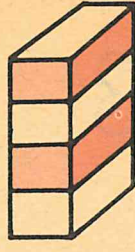
first



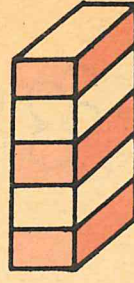
second



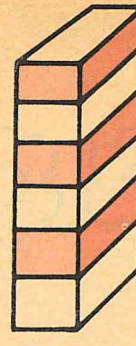
third



fourth



fifth



sixth



The boy has built towers with his blocks.

The **fifth** tower is after the fourth tower.

The **sixth** tower is after the fifth tower.

The first tower has block.

The second tower has blocks.

The fourth tower has



red blocks.

The third tower has blocks.

The fourth tower has blocks.

The fifth tower has

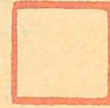


red blocks.

The fifth tower has blocks.

The sixth tower has blocks.

The sixth tower has



red blocks.

Circle the right word.

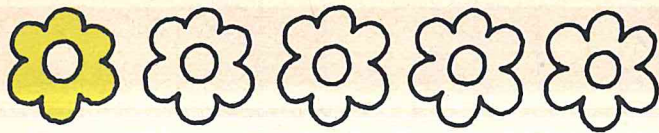
The smallest tower is the { first.
second.

The tallest tower is the { fifth.
sixth.

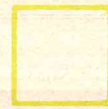
There are 3 white blocks in the { fifth
sixth tower.

In the third tower, the middle block is { red.
white.

Groups in Five



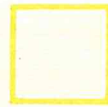
There are 5 flowers here.



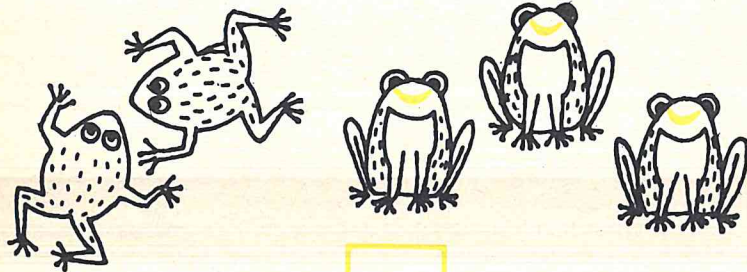
flower is green.



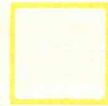
flowers are white.



and are 5.



There are frogs here.



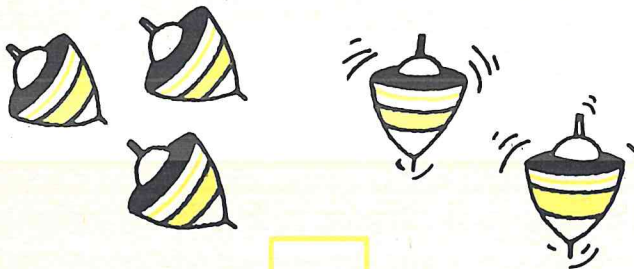
frogs are jumping.



frogs are sitting.



and are 5.



There are tops here.



tops are lying still.



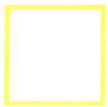
tops are spinning.



and are 5.



There are girls here.



girls have made a ring.



girl is inside the ring.



and are 5.

Write the number story of each picture.



and are 5.



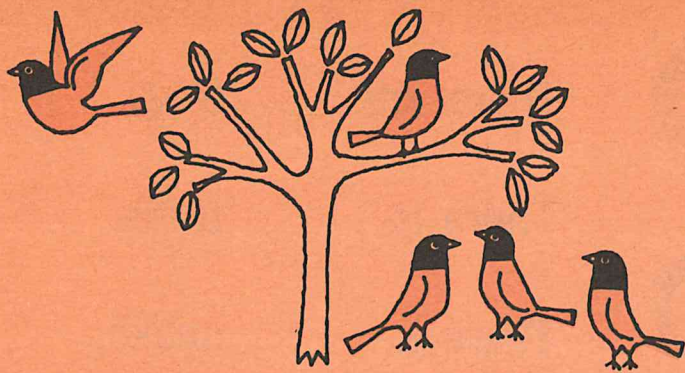
and are 5.



and are 5.



and are 5.



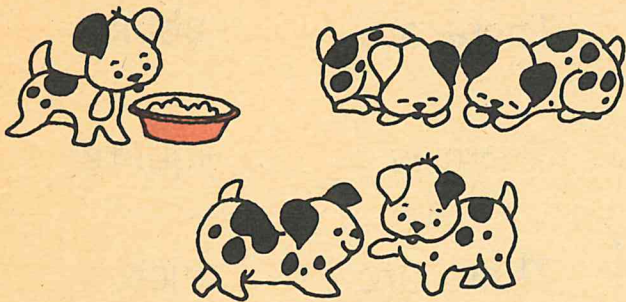
There are birds here.

bird is on the tree.

bird is flying.

birds are on the ground.

and and are 5.



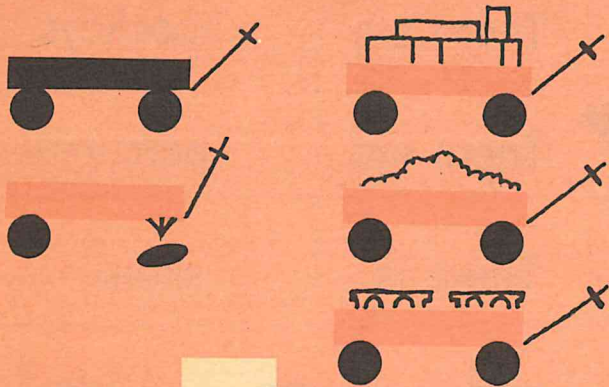
There are puppies here.

puppy is eating.

puppies are sleeping.

puppies are playing.

and and are 5.



There are wagons here.

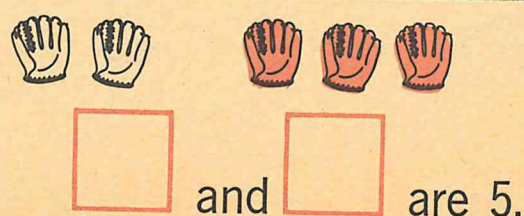
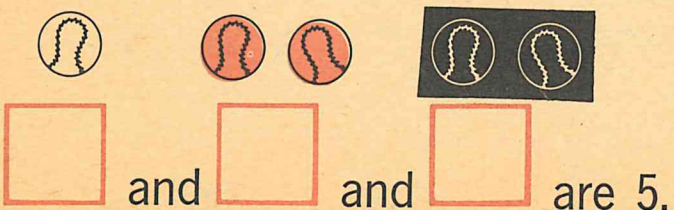
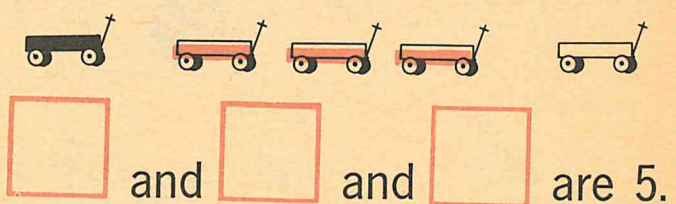
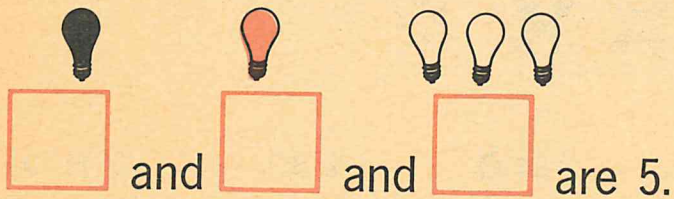
wagon is black.

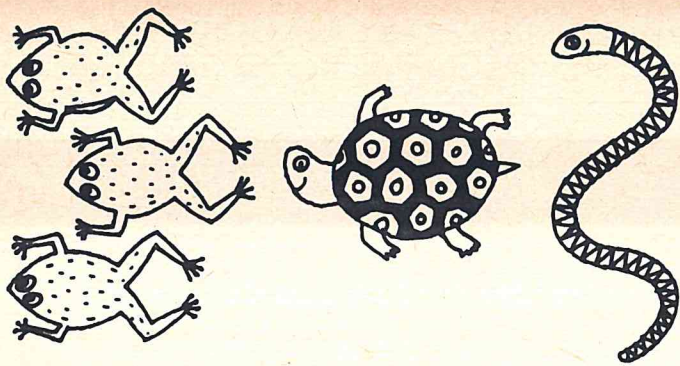
wagon is broken.

wagons are loaded.

and and are 5.

Write the number story of each picture.



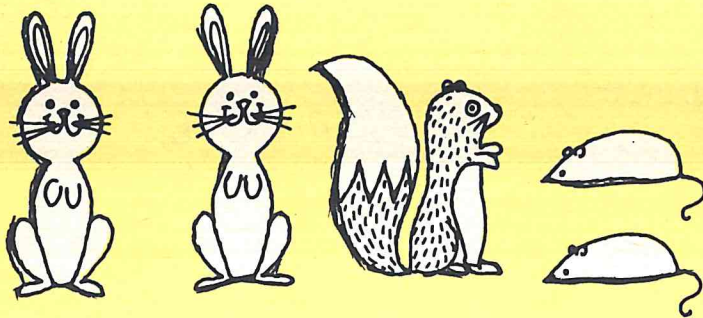


There are frogs.

There is turtle.

There is snake.

There are animals here. and and are 5.

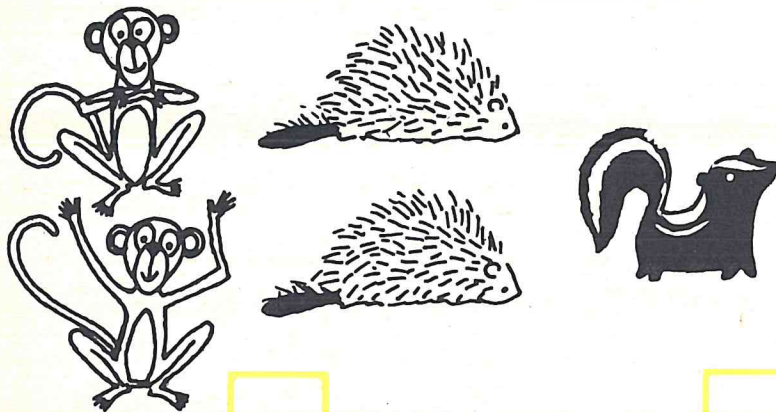


There are rabbits.

There is squirrel.

There are mice.

There are animals here. and and are 5.



There are monkeys.

There are porcupines.

There is skunk.

There are animals here. and and are 5.

Write the number story of each picture.



and and are 5.



and and are 5.



and and are 5.



and are 5.

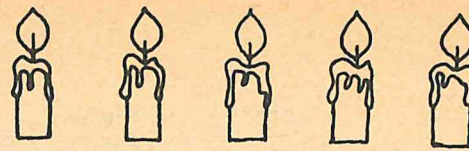


Color the first two checkers red.

Color the rest black.

checkers are black.

and are 5.

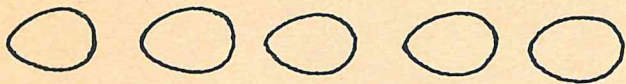


Color the first candle brown.

Color the rest yellow.

candles are yellow.

and are 5.



Color the first egg pink.

Color the next two eggs gray.

Color the rest green.

eggs are green.

and and are 5.



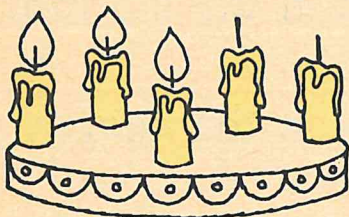
Color the first circle red.

Color the second circle blue.

Color the rest yellow.

circles are yellow.

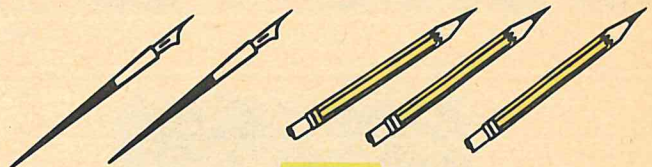
and and are 5.



candles are burning.

candles are out.

and are 5.

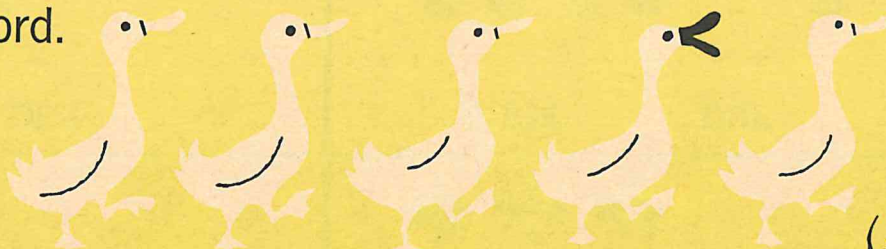


There are pens here.

There are pencils here.

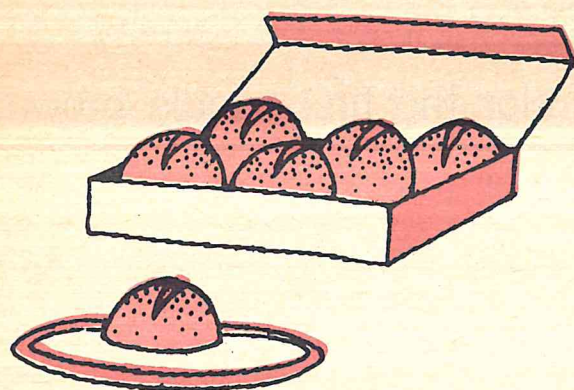
and are 5.

Circle the right word.



The duck with the black bill is { fourth.
fifth.

Groups in Six



There are 6 rolls here.

rolls are in the box.

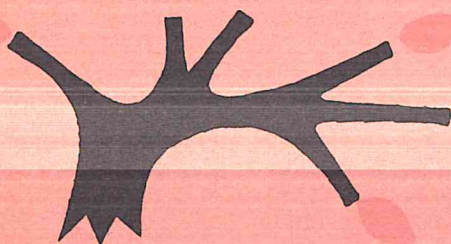
roll is on the plate.

rolls and roll are 6 rolls.

and are 6.

The tree has branches.

branches have leaves.

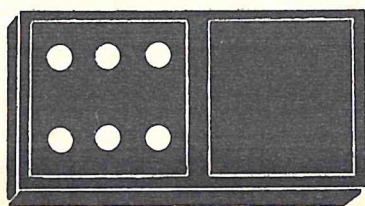


branches are bare.

branches and branches are 6 branches.

and are 6.

This domino has dots.



dots are in the top row.

dots are in the bottom row.

dots and dots are 6 dots.

and are 6.

Write the number story of each picture.



and are 6.





and are 6.

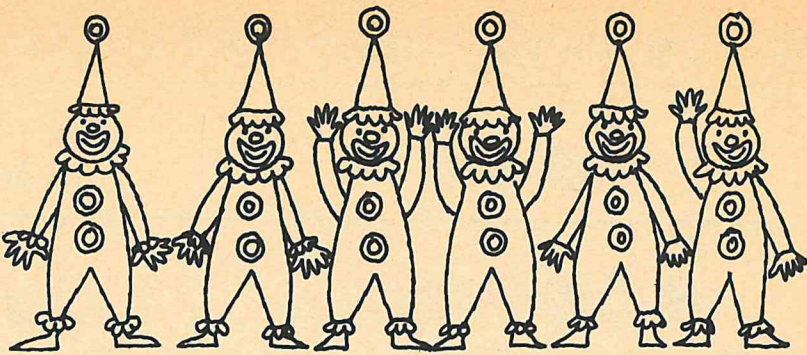


and are 6.



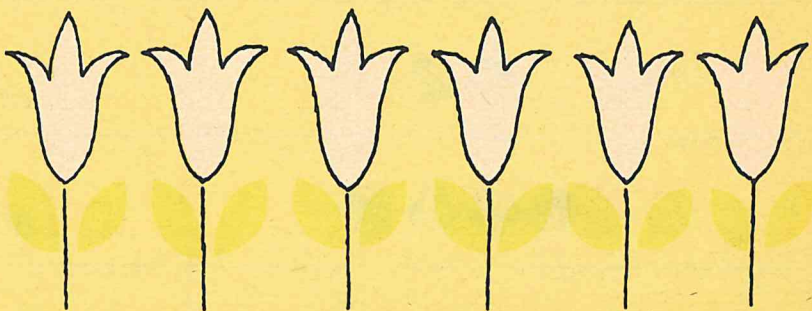
and are 6.

Color two clown suits red.
 Color two suits green.
 Color the rest brown.



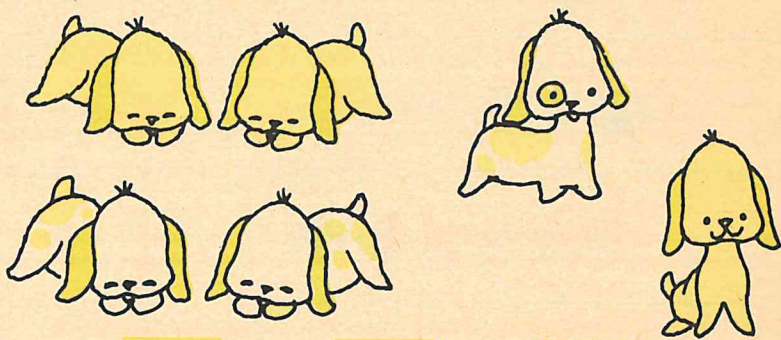
suits are brown. and and are 6.

Color three flowers purple.
 Color two flowers yellow.
 Color the rest orange.



flower is orange. and and are 6.

puppies are sleeping.
 puppy is standing.
 puppy is sitting.



and and are 6.

Write the number story of each picture.

★ ★ ★ ★ ★ ★

and and are 6.

♥ ♥ ♥ ♥ ♥ ♥

and and are 6.

🌸 🌸 🌸 🌸 🌸 🌸

and and are 6.

🍁 🍁 🍁 🍁 🍁 🍁

and and are 6.

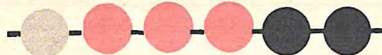
Write the number story of each picture.



and and are 6.



and are 6.



and and are 6.



and are 6.



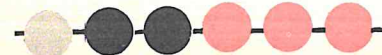
and and are 6.



and are 6.



and and are 6.



and and are 6.



and and are 6.



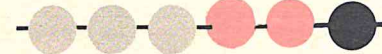
and are 6.



and and are 6.



and and are 6.



and and are 6.



and and are 6.

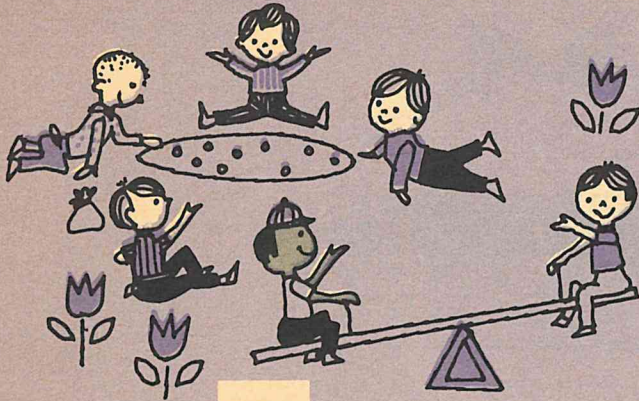


and and are 6.



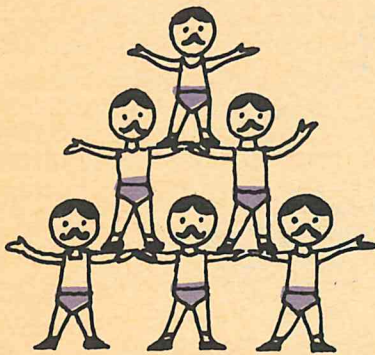
girls are playing jump rope.
 girls are skating.
 and are 6.

There are girls here.



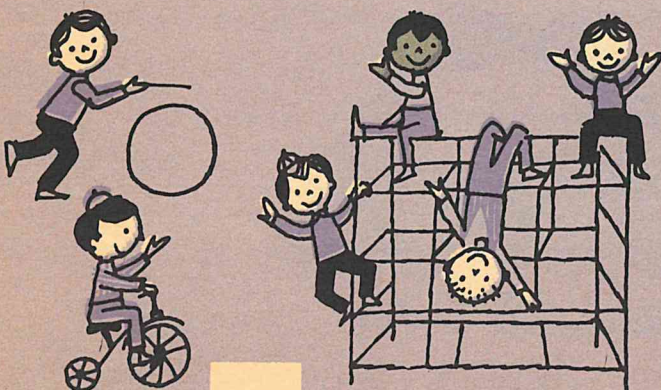
boys are playing marbles.
 boys are on the seesaw.
 and are 6.

There are boys here.



men are in the bottom row.
 men are in the middle row.
 man is in the top row.
 and and are 6.

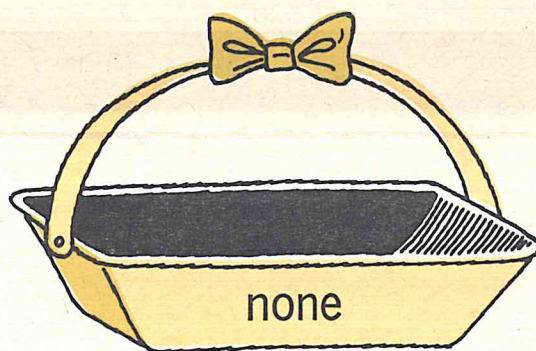
There are men here.



boy is rolling a hoop.
 boy is on a tricycle.
 boys are on the jungle gym.
 and and are 6.

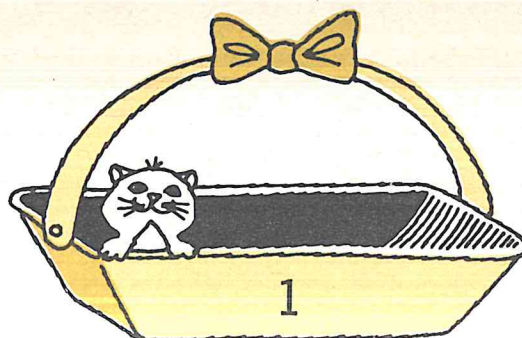
There are boys here.

One More



This basket is empty.

There are no kittens in the basket. There are none in the basket.

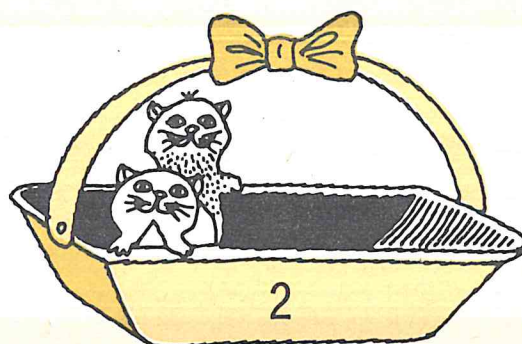


One kitten has jumped into the basket.

There is one kitten in the basket.



is one more than none.

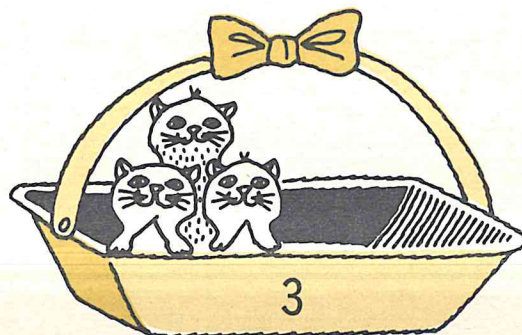


A second kitten has jumped into the basket.

There are two kittens in the basket.



is one more than 1.

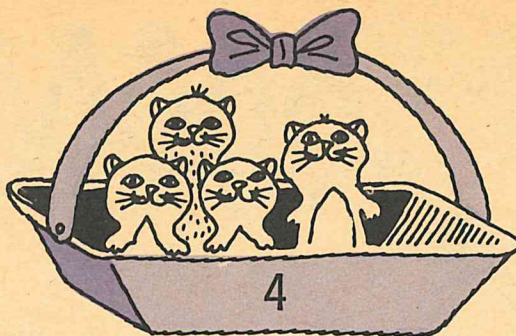


A third kitten has jumped into the basket.

There are three kittens in the basket.

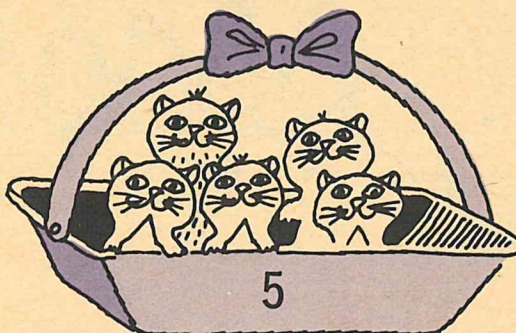


is one more than 2.



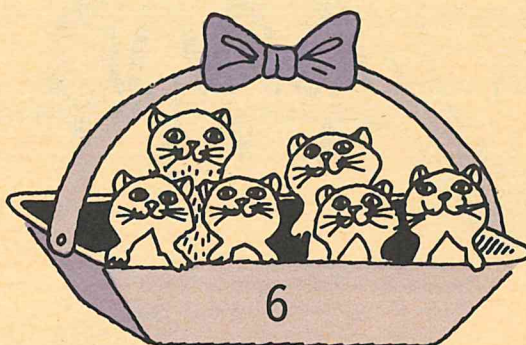
A fourth kitten has jumped
into the basket.

There are four kittens in the basket. is one more than 3.



A fifth kitten has jumped
into the basket.

There are five kittens in the basket. is one more than 4.



A sixth kitten has jumped
into the basket.

There are six kittens in the basket. is one more than 5.

One more than none is

One more than 3 is

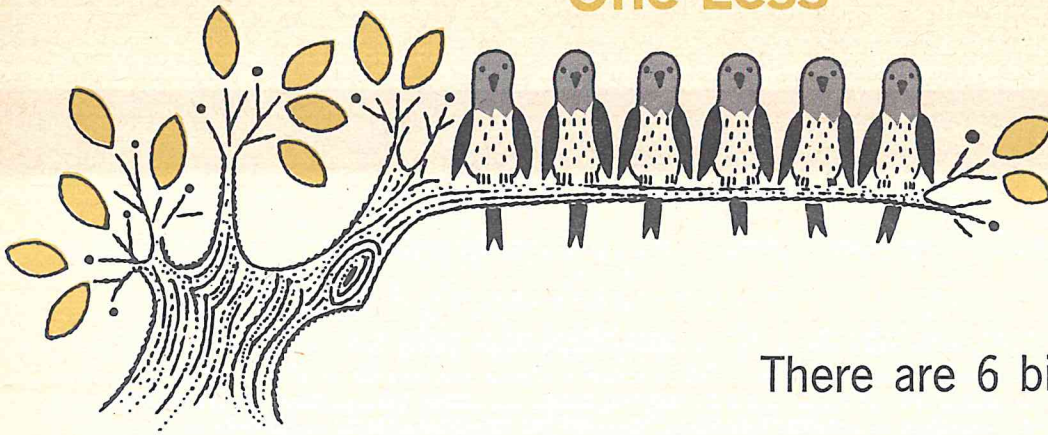
One more than 1 is

One more than 4 is

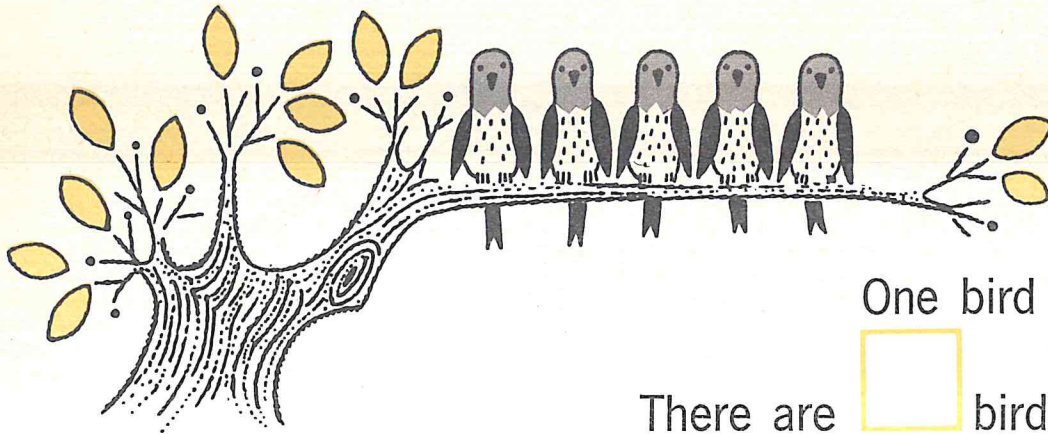
One more than 2 is

One more than 5 is

One Less



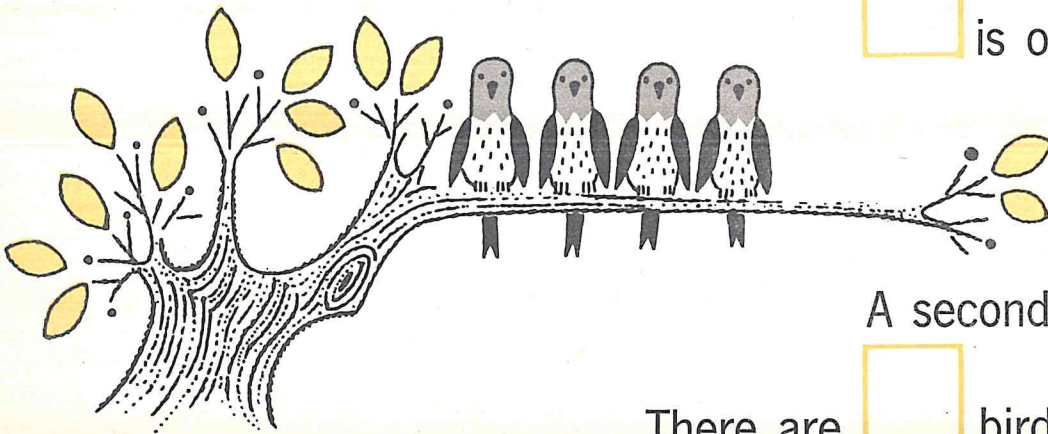
There are 6 birds on the tree.



One bird flew away.

There are birds on the tree.

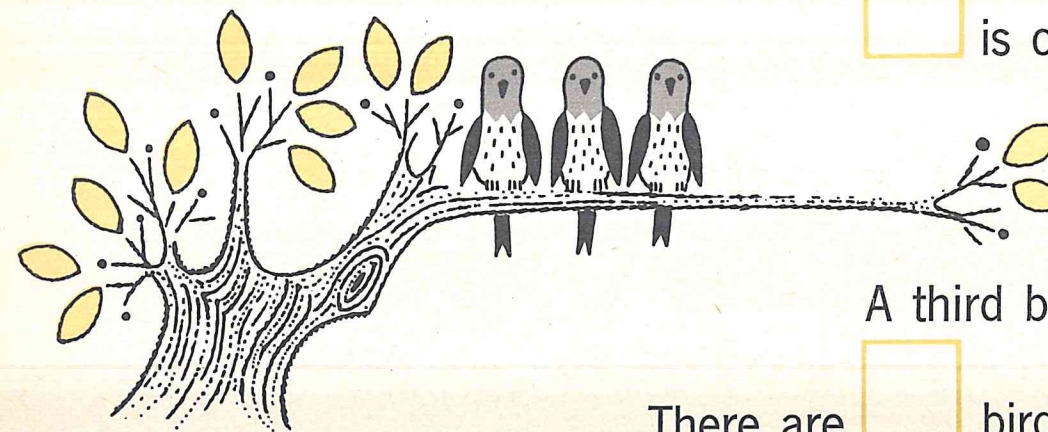
is one less than 6.



A second bird flew away.

There are birds on the tree.

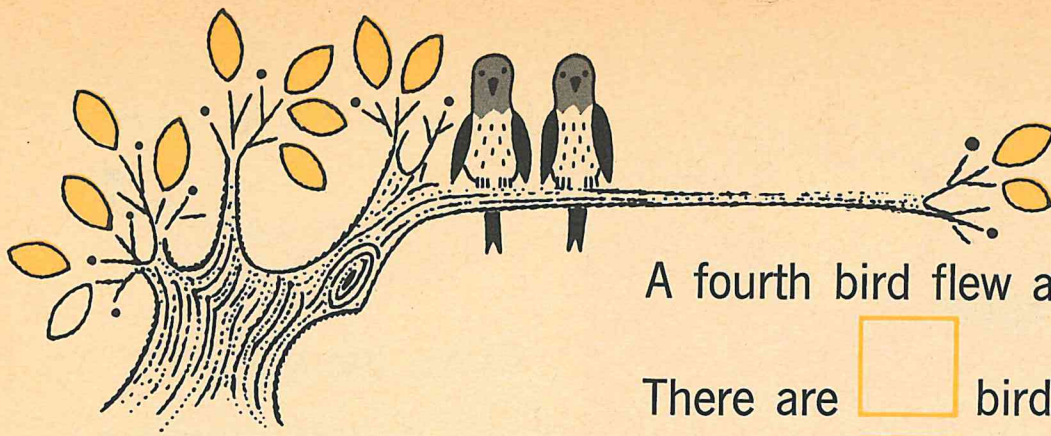
is one less than 5.



A third bird flew away.

There are birds on the tree.

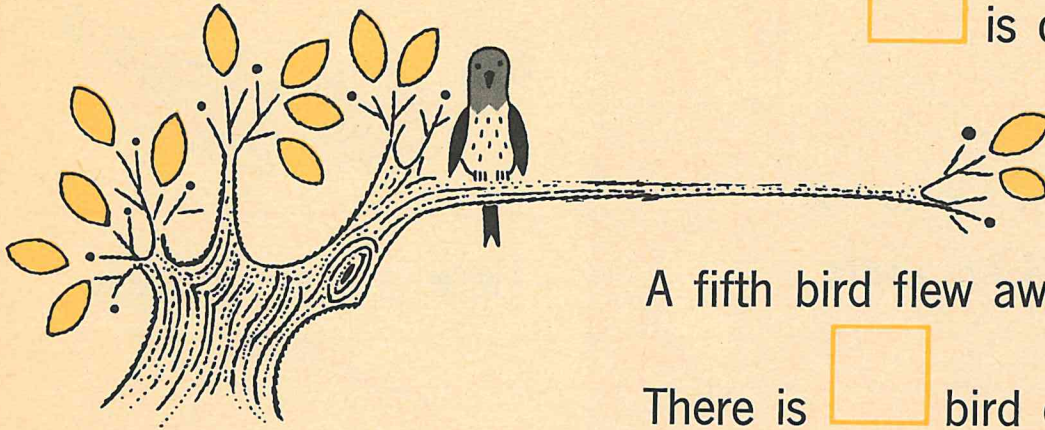
is one less than 4.



A fourth bird flew away.

There are birds on the tree.

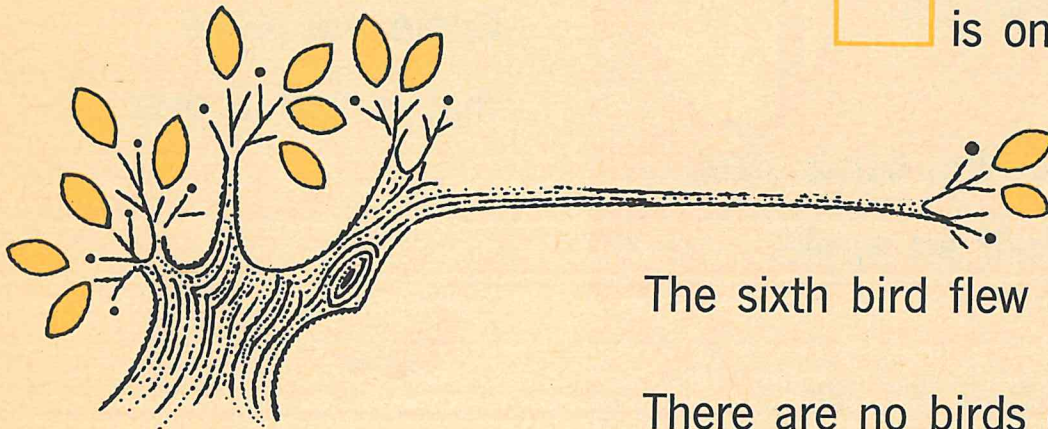
is one less than 3.



A fifth bird flew away.

There is bird on the tree.

is one less than 2.



The sixth bird flew away.

There are no birds on the tree.

No birds is one less than bird.

One less than 6 is

One less than 3 is

One less than 5 is

One less than 2 is

One less than 4 is

One less than is none.

Half

Here is a whole apple.



This apple has been cut into two pieces.



The pieces are the same size.

Each piece is half an apple.

This is half an apple.



This apple has been cut into two pieces.



The pieces are not the same size.

Neither piece is half an apple.

This piece is not half an apple.

It is less than half an apple.



This piece is not half an apple.

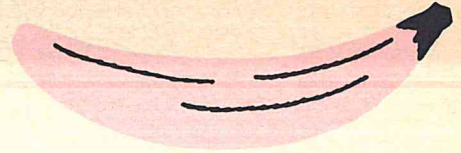
It is more than half an apple.



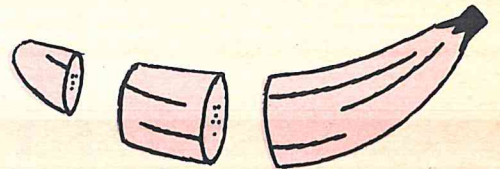
Circle the piece that is half an apple.



Here is a whole banana.



Circle the piece that is half a banana.



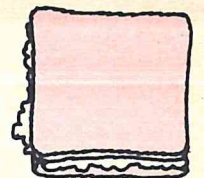
Here is a whole pear.



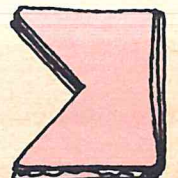
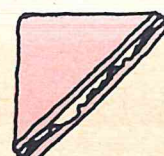
Circle the piece that is half a pear.



Here is a whole sandwich.



Circle the piece that is half a sandwich.



Quart

Pint

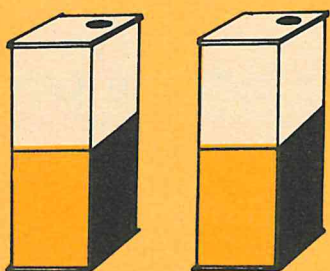
Cup

Take two empty quart milk cartons.

Draw a line around the middle of each carton.

Pour water into each carton up to the line.

Then each carton is half full.

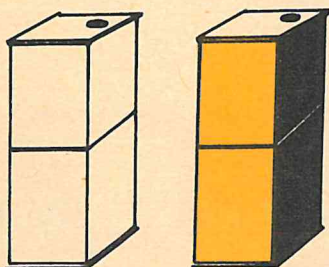


Each carton has
half a quart of water.
Half a quart is called a pint.

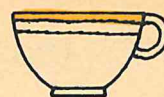
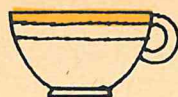
Pour water from one carton
into the other.

Now one carton is empty.

The other carton is full.



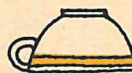
2 half quarts make a whole quart.
2 pints equal one quart.



Fill two cups with water.

Pour the water from the cups
into an empty quart carton.

The water will reach the line.



2 cups equal half a quart.

2 cups equal one pint.



Fill four cups with water.

Pour the water from the cups
into an empty quart carton.

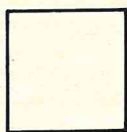
The water will fill the carton.



4 cups equal one quart.

Half of Two, Four, and Six

Color with red crayon all the squares to the left of the dotted line.
Color the rest of the squares green.



Here is a group of 2 squares.

The dotted line cuts the group in half.

Half of 2 squares is square.



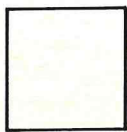
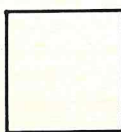
Here is a group of squares.

The dotted line cuts the group in half.

There are halves.

There are squares in each half.

Half of 4 is



Here is a group of squares.

The dotted line cuts the group in half.

There are halves.

There are squares in each half.

Half of 6 is

1 and 1 are

Half of is 1.

2 and 2 are

Half of is 2.

3 and 3 are

Half of is 3.



Half of 2

is



Half of

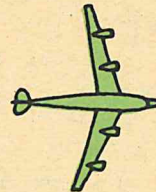
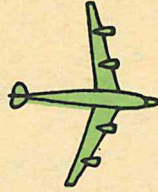


is



Half of 6

is



Half of

is



Half of 4

is



Half of

is



Half of

is



Half of

is



Half of

is



Half of

is



Half of

is



Half of

is

Pennies and Nickels



Here are five pennies. They are also called **five cents**.

Here is one nickel.

nickel



A nickel is worth five cents.

A nickel is worth as much as five pennies.

A nickel will buy the same things that five pennies will buy.



Fred bought an eraser.

The eraser cost five cents.

He paid for it with five pennies.

Tom bought the same kind of eraser.

The eraser cost five cents.

He paid for it with a nickel.

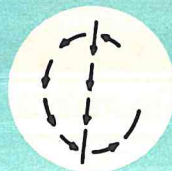
¢ means cents.

5¢ means five cents.

Five pennies are worth 5¢.

One nickel is worth 5¢.

Write ¢ in each circle.



In the box under each group of coins,
write the number of cents in the coins.



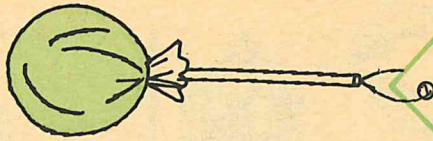
Writing the Price

The coins under each thing tell you the price.

Write the price on the price tag.



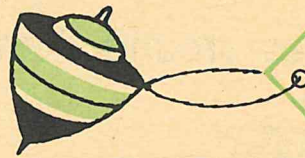
Price



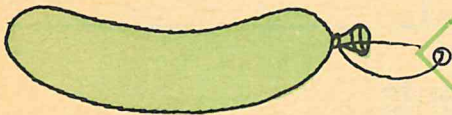
Price



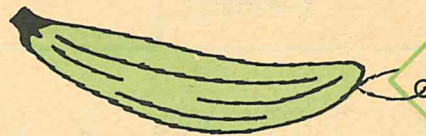
Price



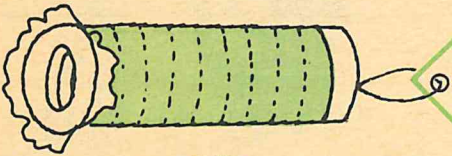
Price



Price



Price



Price



Price



Price

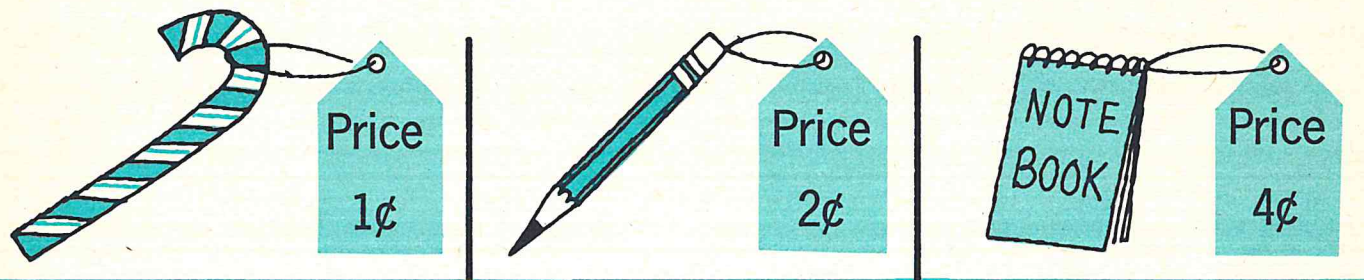


Price

What Can You Buy?

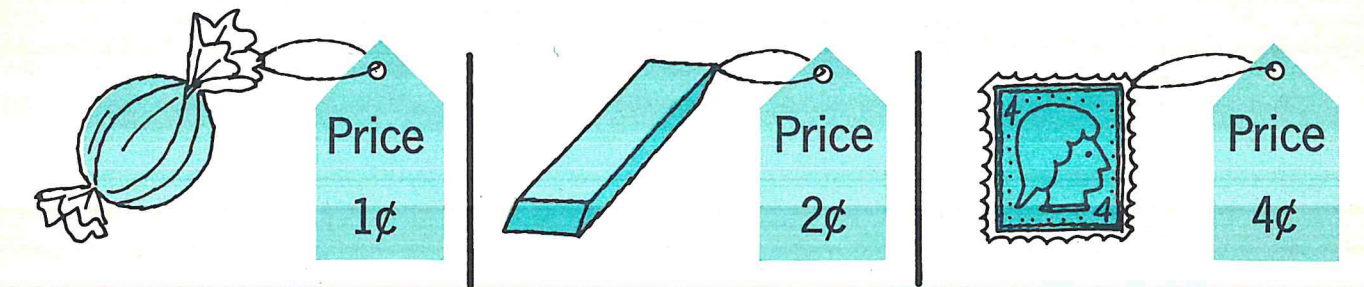
Pick out two things you can buy for six cents.

Draw circles around them.



Pick out two things you can buy for three cents.

Draw circles around them.



Pick out two things you can buy for five cents.

Draw circles around them.



Pick out two things you can buy for a nickel.

Draw circles around them.



Completing the Group



Draw more circles
until there are 5 circles.

2 and are 5.



Draw more nails
until there are 4 nails.

2 and are 4.



Draw more squares
until there are 3 squares.

1 and are 3.



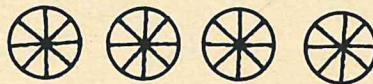
Draw more balloons
until there are 5 balloons.

1 and are 5.



Draw more triangles
until there are 4 triangles.

3 and are 4.



Draw more wheels
until there are 6 wheels.

4 and are 6.



Draw more fish
until there are 6 fish.

3 and are 6.



Draw more houses
until there are 5 houses.

3 and are 5.



Draw more flowers
until there are 6 flowers.

5 and are 6.



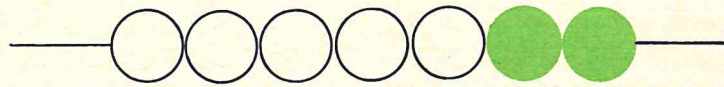
Draw more cats
until there are 6 cats.

2 and are 6.

Meaning of Seven and Eight

seven

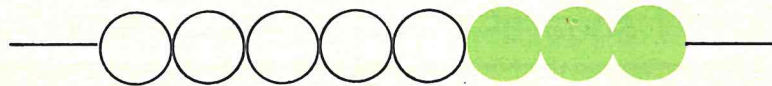
7



There are seven beads here. Seven is five and two.

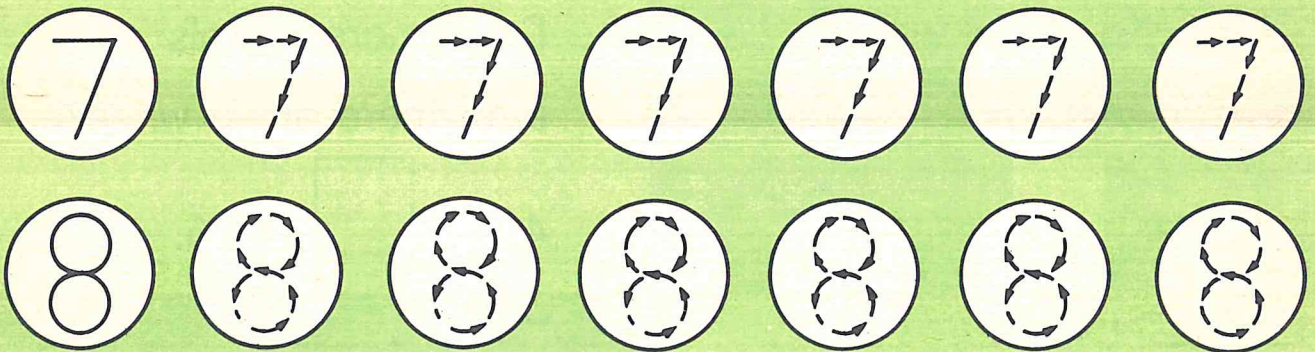
eight

8

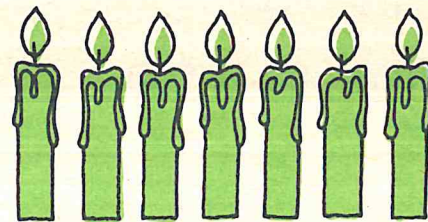
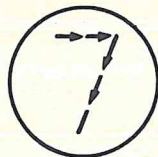


There are eight beads here. Eight is five and three.

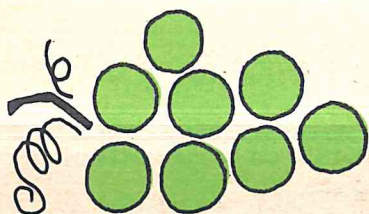
Write the number in each circle.



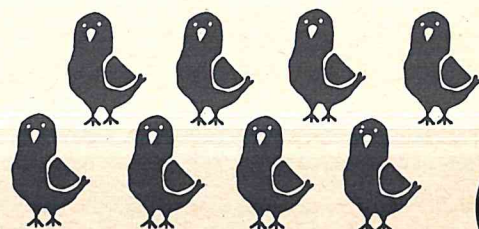
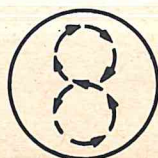
seven hearts



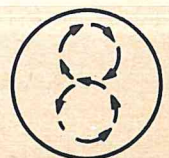
seven candles



eight grapes



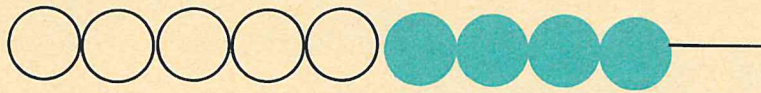
eight chicks



Meaning of Nine and Ten

nine

9



There are nine beads here. Nine is five and four.

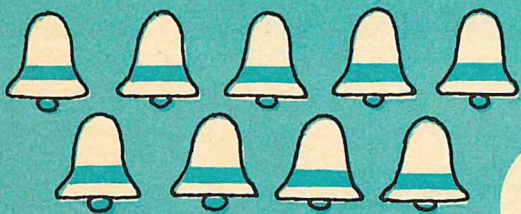
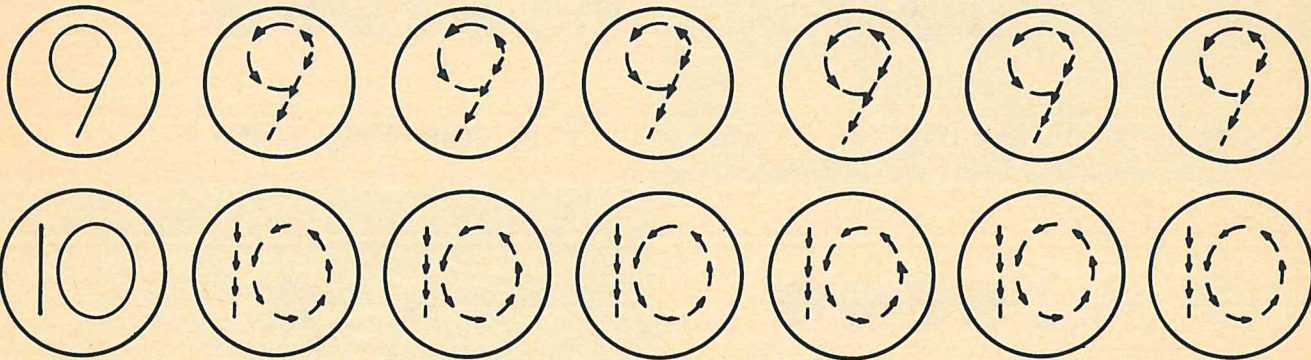
ten

10

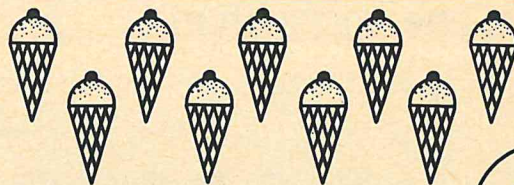
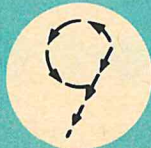


There are ten beads here. Ten is five and five.

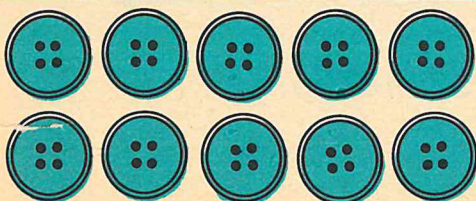
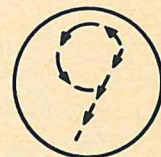
Write the number in each circle.



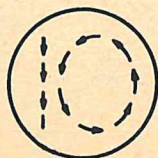
nine bells



nine cones



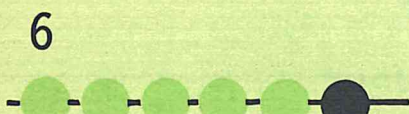
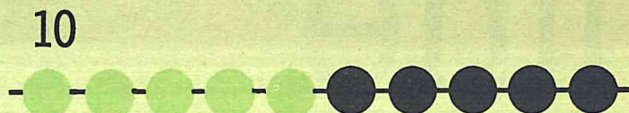
ten buttons



ten canes



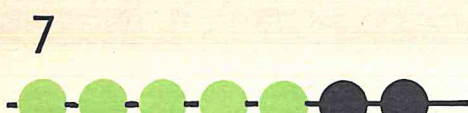
Meaning of Five to Ten



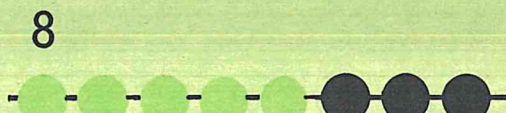
6 is one more than



9 is one less than



7 is one more than



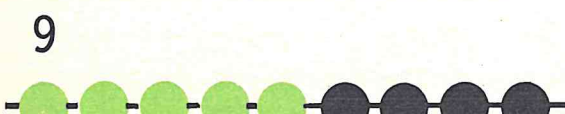
8 is one less than



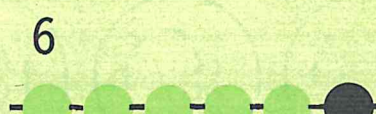
8 is one more than



7 is one less than



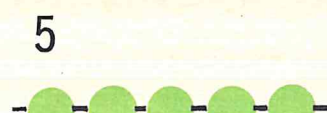
9 is one more than



6 is one less than



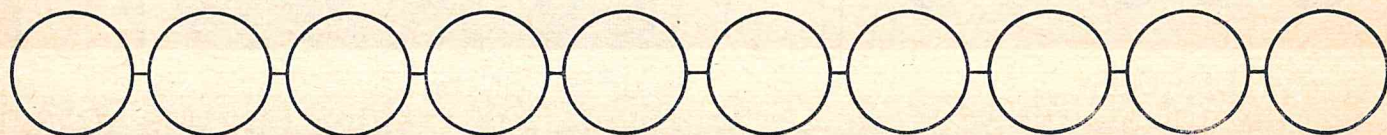
10 is one more than



5 is one less than

Write the numbers from one to ten on these beads.

Start at the left.





There are puppies in the line above.

puppies are black.

puppies are white.

Cover the line of puppies with a ruler.

Pull the ruler slowly to the right to uncover one puppy at a time.

After the first puppy is uncovered, you see puppy.

After the second puppy is uncovered, you see puppies.

After the third puppy is uncovered, you see puppies.

After the fourth puppy is uncovered, you see puppies.

After the fifth puppy is uncovered, you see puppies.

After the sixth puppy is uncovered, you see puppies.

After the seventh puppy is uncovered, you see puppies.

After the eighth puppy is uncovered, you see puppies.

After the ninth puppy is uncovered, you see puppies.

After the tenth puppy is uncovered, you see puppies.

Read out loud the numbers you just wrote down.

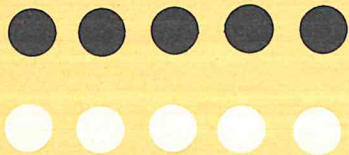
Read them from the top of the list to the bottom.

You say the numbers in this order when you count from one to ten.

Guessing and Counting

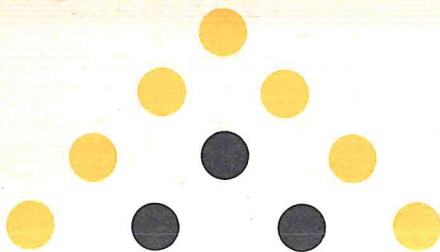
First guess how many dots are in each picture.

Then count the number of dots.



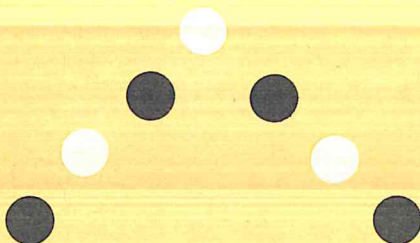
The number
you guessed:

The number
you counted:



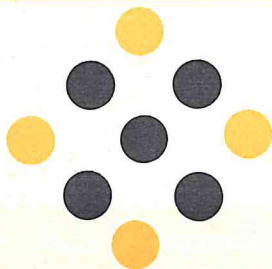
The number
you guessed:

The number
you counted:



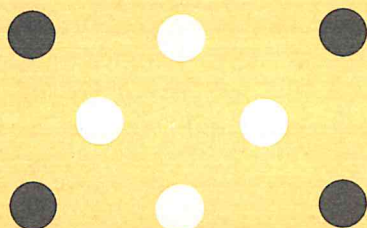
The number
you guessed:

The number
you counted:



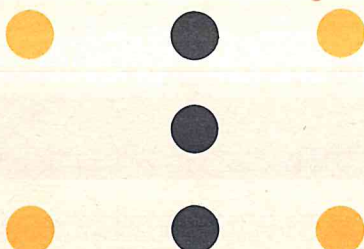
The number
you guessed:

The number
you counted:



The number
you guessed:

The number
you counted:



The number
you guessed:

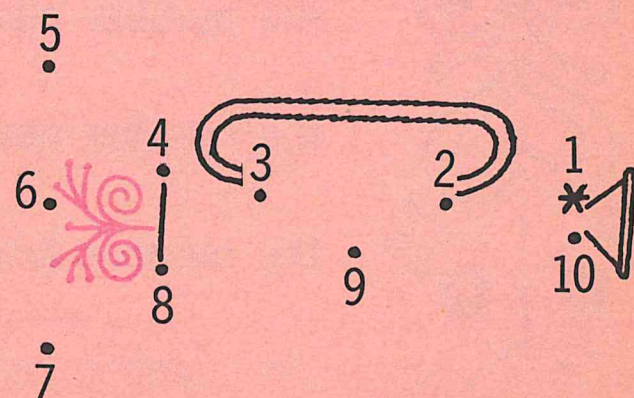
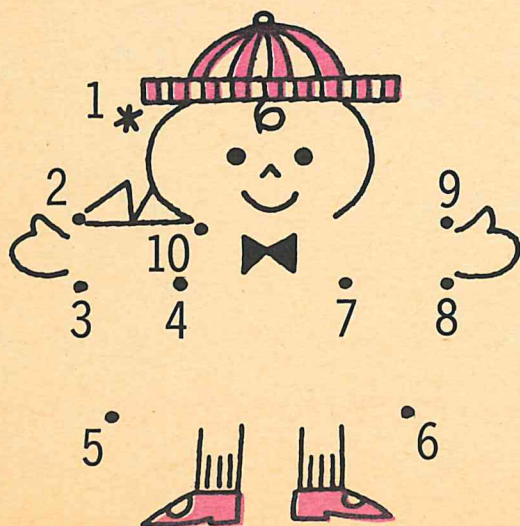
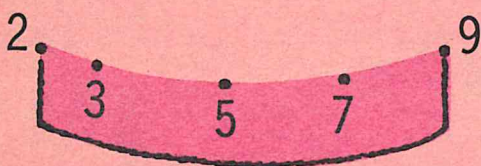
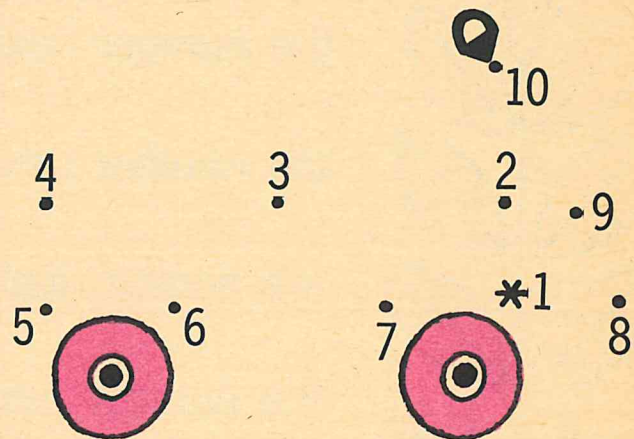
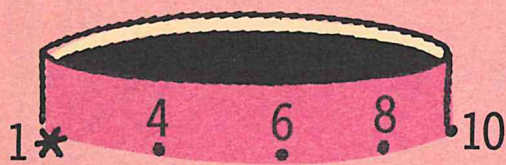
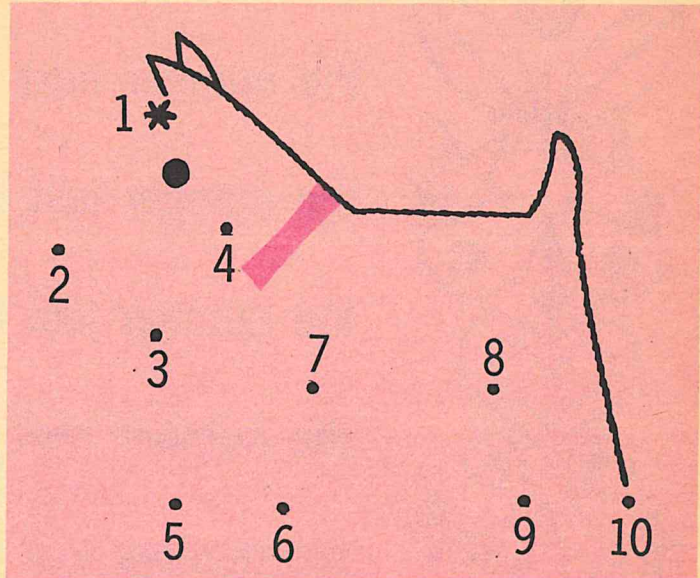
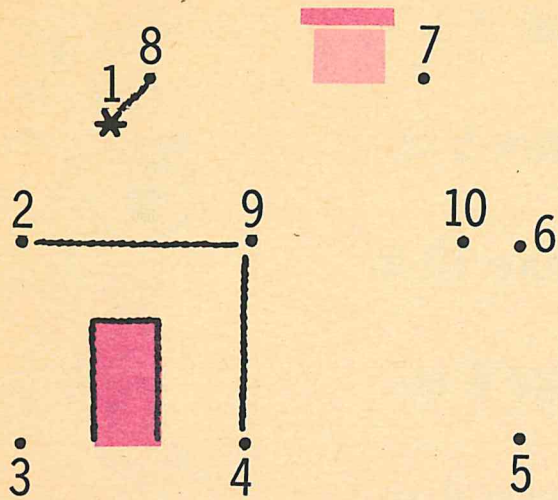
The number
you counted:

Hidden Pictures

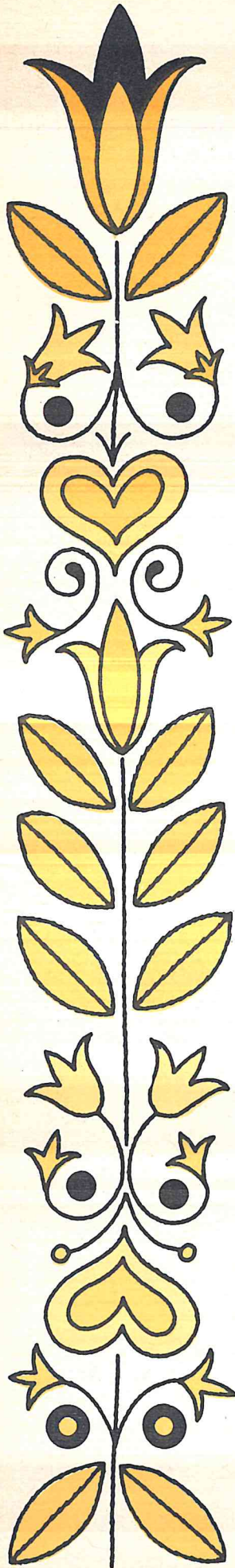
There is a picture hidden in each box below.

To see the picture, join the dots in order.

Draw a line from dot 1 to dot 2, and so on, until you reach dot 10.



Before and After



When you count from one to ten,

the number next after 2 is

the number just before 5 is

the number just before 10 is

the number next after 6 is

the number just before 4 is

the number next after 7 is

the number next after 5 is

the number just before 9 is

the number just before 7 is

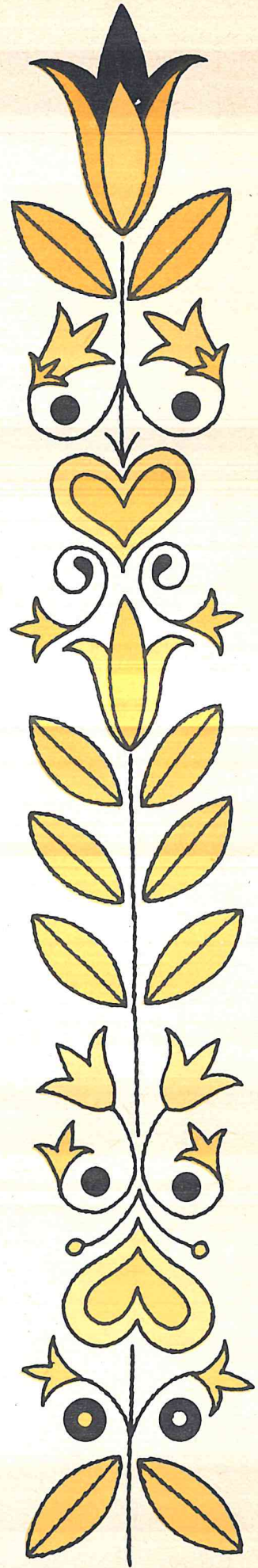
the number next after 4 is

the number next after 8 is

the number next after 3 is

the number just before 8 is

the number just before 6 is



Groups in Seven

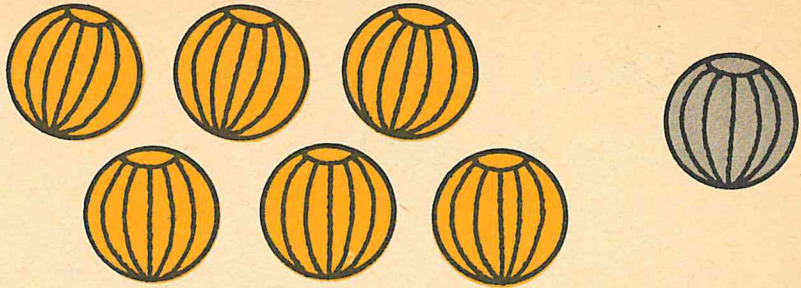
There are 7 balls here.

balls are orange.

ball is gray.

balls and ball are 7 balls.

and are 7.



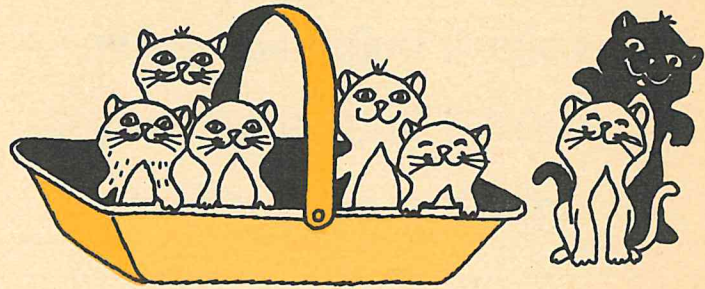
There are kittens here.

kittens are in the basket.

kittens are outside.

kittens and kittens are 7 kittens.

and are 7.



There are books here.

books are standing up.

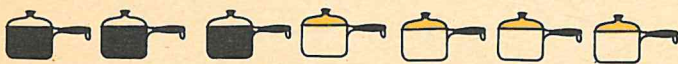
books are lying down.

books and books are 7 books.

and are 7.



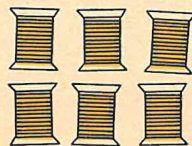
Write the number story of each picture.



and are 7.



and are 7.

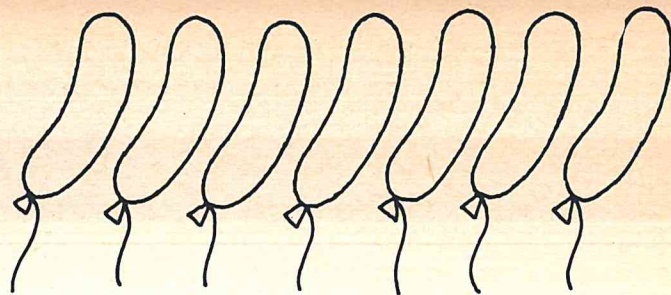


and are 7.

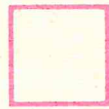


and are 7.

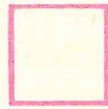
Color 5 balloons red.
Color 1 balloon yellow.
Color the rest blue.



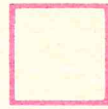
balloon is blue.



and

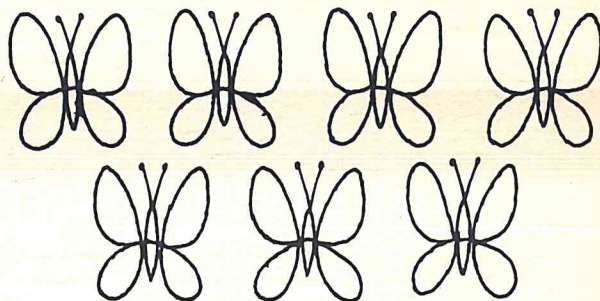


and



are 7.

Color 4 butterflies green.
Color 2 butterflies orange.
Color the rest brown.



butterfly is brown.



and

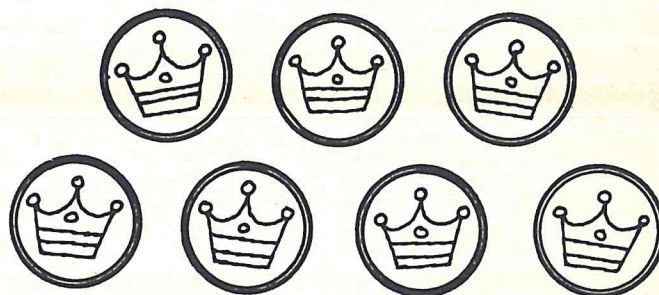


and



are 7.

Color 3 checkers red.
Color 2 checkers black.
Leave the rest white.



checkers are white.



and

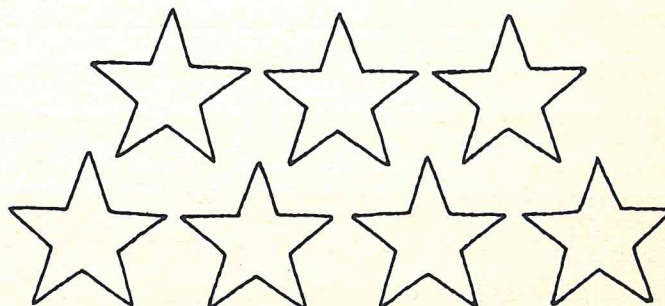


and



are 7.

Color 3 stars purple.
Color 3 stars yellow.
Color the rest blue.



star is blue.



and



and



are 7.

Write the number story of each picture.



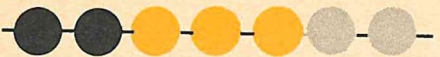
and are 7.



and are 7.



and are 7.



and and are 7.



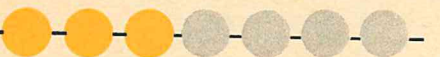
and and are 7.



and and are 7.



and and are 7.



and are 7.



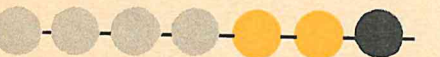
and and are 7.



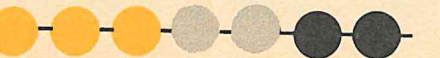
and are 7.



and and are 7.



and and are 7.



and and are 7.



and and are 7.



and and are 7.

Days of the Week

Here are the days of the week.

They come after each other in this order:

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |

Count them. There are days in a week.

Circle the right word.

The first day of the week is

{ Monday.
{ Sunday.

The last day of the week is

{ Thursday.
{ Saturday.

The third day of the week is

{ Tuesday.
{ Wednesday.

On some calendars, only one letter is written for each day.

They are written at the top of the calendar like this:

S M T W T F S

Draw a circle around the letter that stands for Sunday.

Draw a square around the letter that stands for Saturday.

Draw a triangle around the letter that stands for Tuesday.

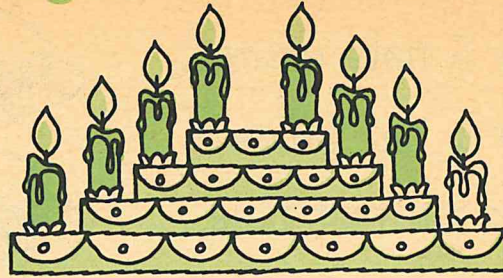
Draw a line under the letter that stands for Thursday.

School is open days a week.

School is closed days a week.

Groups in Eight

There are 8 candles on the cake.

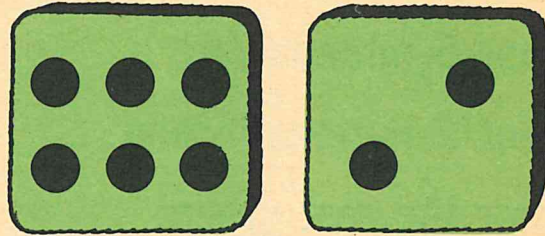


candles are green.

candle is white.

candles and candle are 8 candles. and are 8.

The dice have turned up dots.



dots are on the left die.

dots are on the right die.

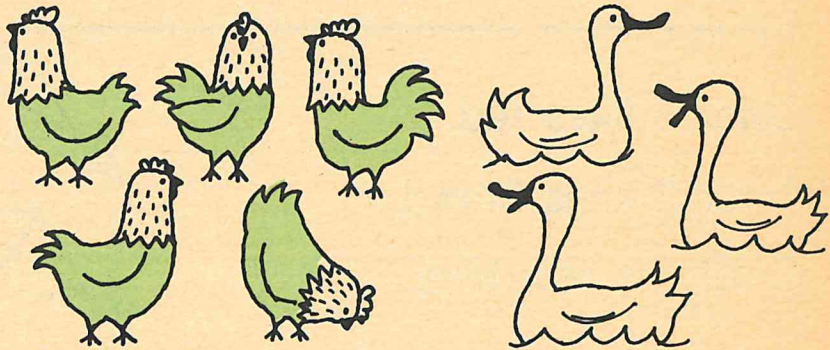
dots and dots are 8 dots. and are 8.

There are birds here.

birds are chickens.

birds are ducks.

birds and birds are 8 birds. and are 8.



Write the number story of each picture.



and are 8.



and are 8.



and are 8.

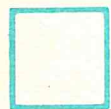
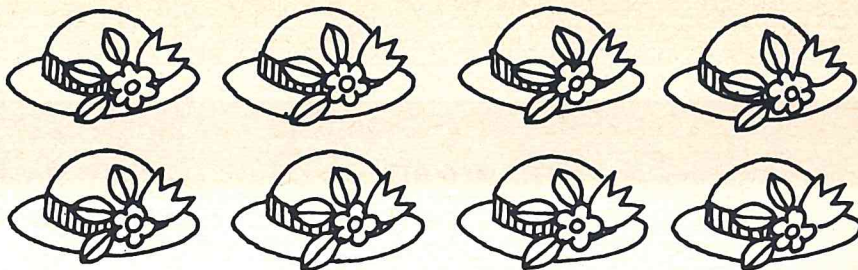


and are 8.

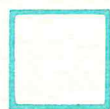
Color 6 hats orange.

Color 1 hat yellow.

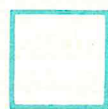
Color the rest blue.



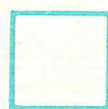
hat is blue.



and



and

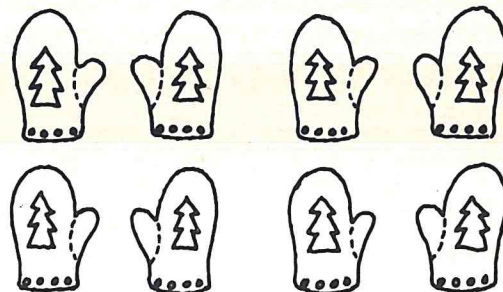


are 8.

Color 5 mittens red.

Color 2 mittens yellow.

Color the rest green.



mitten is green.



and



and

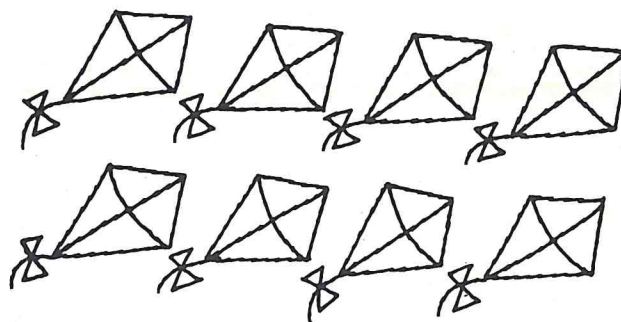


are 8.

Color 4 kites red.

Color 2 kites brown.

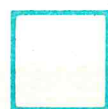
Color the rest blue.



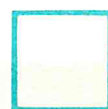
kites are blue.



and



and

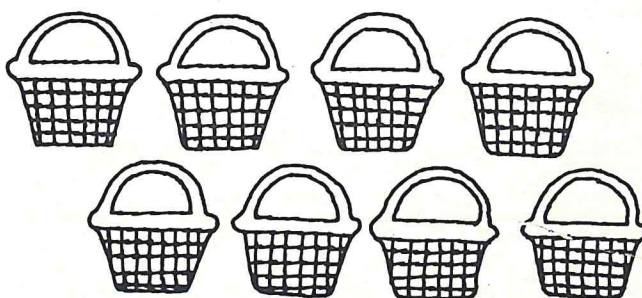


are 8.

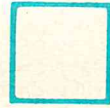
Color 3 baskets red.

Color 3 baskets yellow.

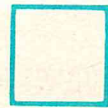
Color the rest blue.



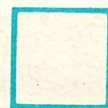
baskets are blue.



and



and



are 8.

Write the number story of each picture.



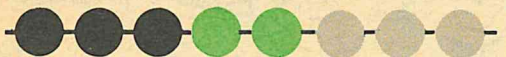
and are 8.



and are 8.



and and are 8.



and and are 8.



and and are 8.



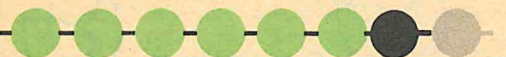
and are 8.



and and are 8.



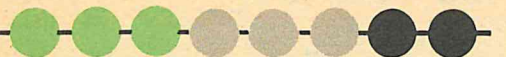
and are 8.



and and are 8.



and are 8.



and and are 8.



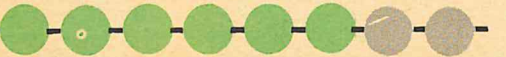
and and are 8.



and and are 8.



and are 8.

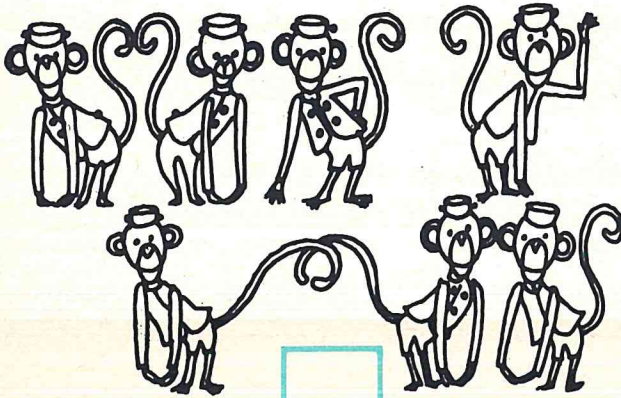


and are 8.

Guessing and Counting

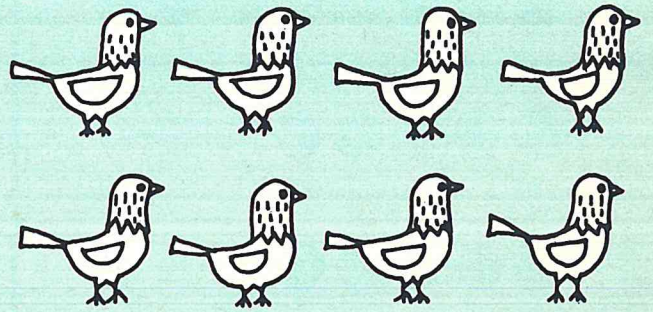
First guess how many animals are in each picture.

Then count the animals to see if your guess was right.



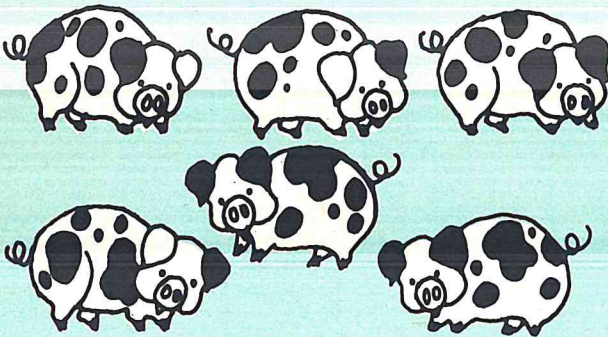
You guessed monkeys.

You counted monkeys.



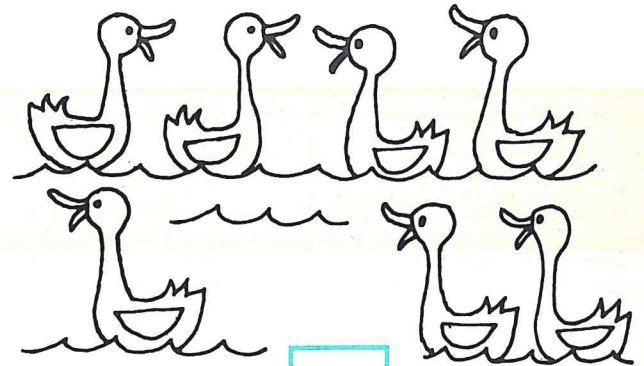
You guessed birds.

You counted birds.



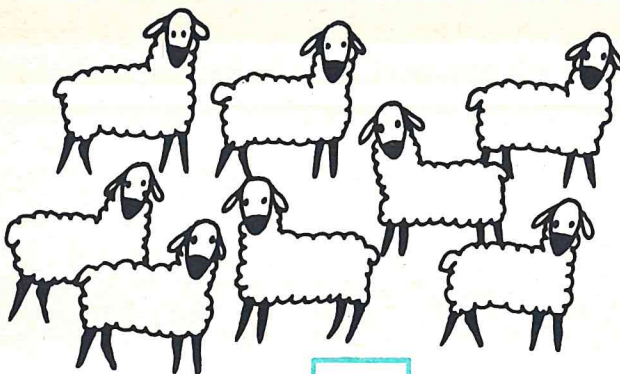
You guessed pigs.

You counted pigs.



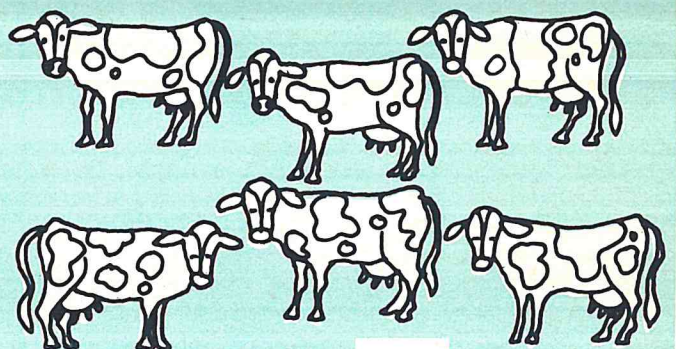
You guessed ducks.

You counted ducks.



You guessed sheep.

You counted sheep.



You guessed cows.

You counted cows.

Groups in Nine

There are 9 candles here.



candles are black.



candle is blue.



candles and



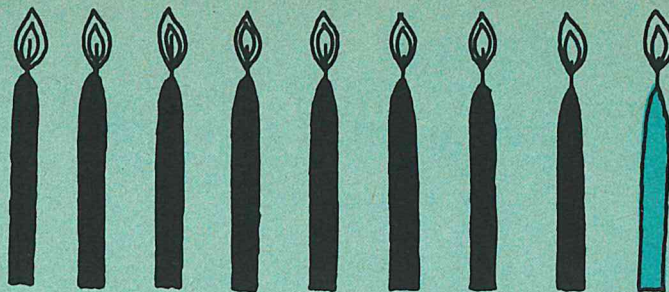
candle are 9 candles.



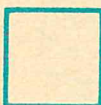
and



are 9.



There are glasses here.



glasses are full.



glasses are empty.



glasses and



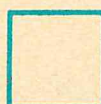
glasses are



glasses.



and



are 9.

There are eggs here.



eggs have not hatched.



eggs have hatched.



eggs and



eggs are



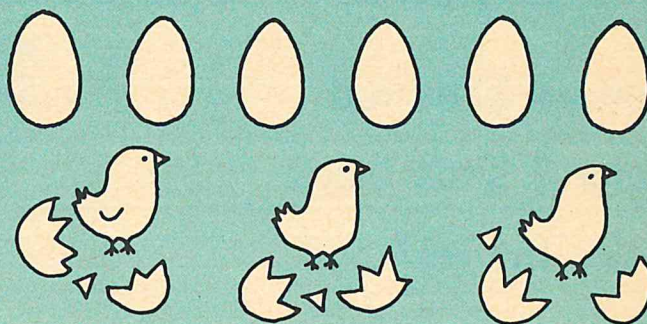
eggs.



and



are 9.



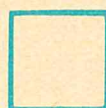
Write the number story of each picture.



and



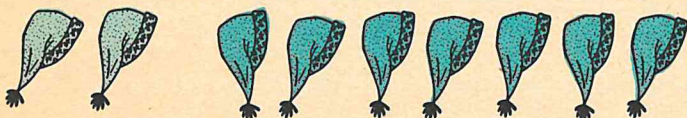
are 9.



and



are 9.



and



are 9.

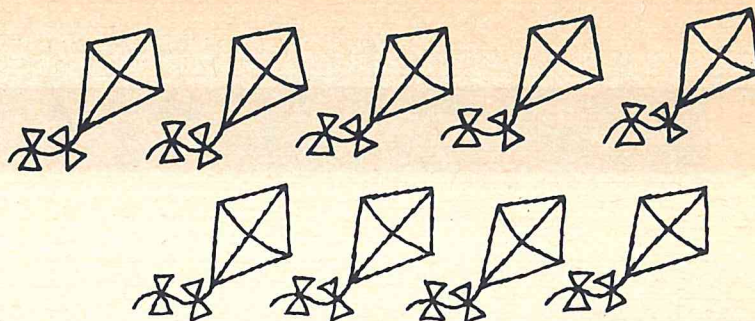


and



are 9.

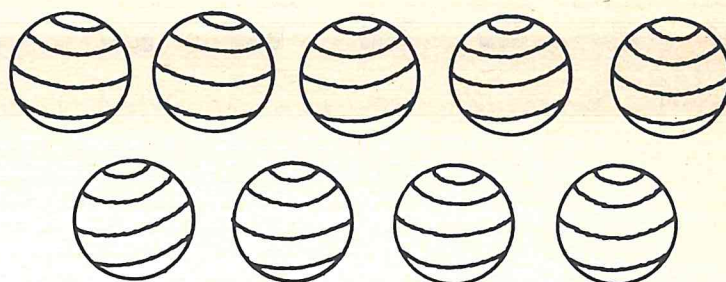
Color 5 kites red.
Color 2 kites green.
Color the rest black.



kites are black.

and and are 9.

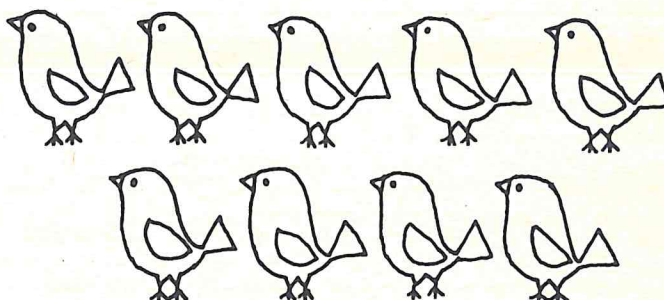
Color 6 balls orange.
Color 2 balls yellow.
Color the rest blue.



ball is blue.

and and are 9.

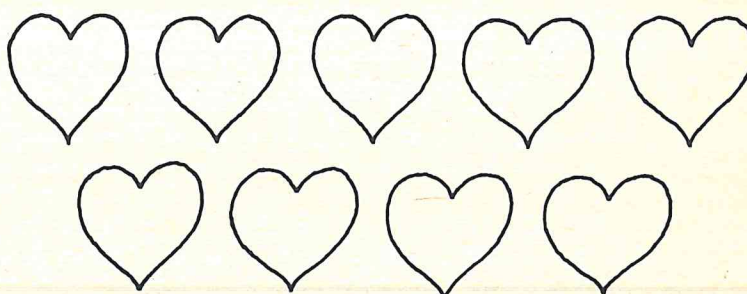
Color 4 birds red.
Color 3 birds black.
Color the rest pink.



birds are pink.

and and are 9.

Color 7 hearts red.
Color 1 heart purple.
Color the rest gray.



heart is gray.

and and are 9.

Write the number story of each picture.



and and are 9.



and are 9.



and and are 9.



and are 9.



and are 9.



and and are 9.



and and are 9.



and are 9.



and and are 9.



and and are 9.



and are 9.



and and are 9.



and are 9.



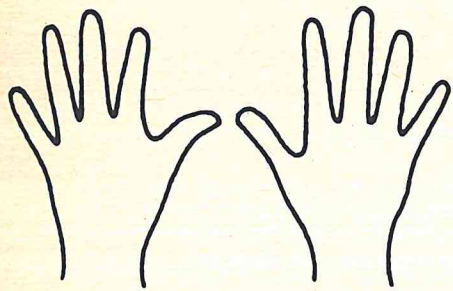
and and are 9.



and are 9.

Groups in Ten

There are 10 fingers here.



fingers are on the left hand.

fingers are on the right hand.

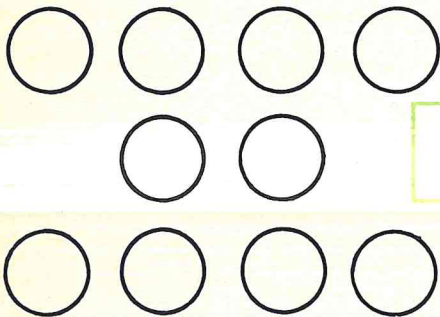
fingers and

fingers are 10 fingers.

and

are 10.

There are circles here.



Color 6 circles blue.

circles are not colored.

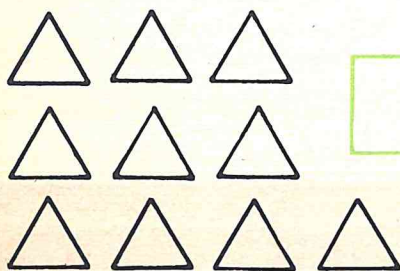
circles and

circles are 10 circles.

and

are 10.

There are triangles here.



Color 7 triangles yellow.

triangles are not colored.

triangles and

triangles are 10 triangles.

and

are 10.

Write the number story of each picture.



and

are 10.



and

are 10.



and

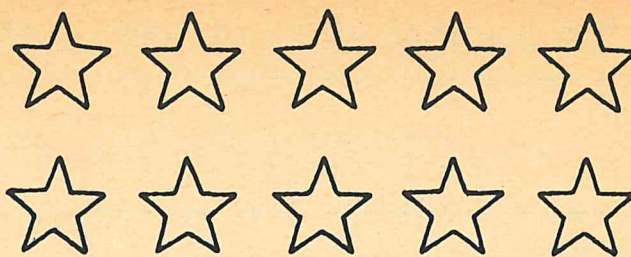
are 10.



and

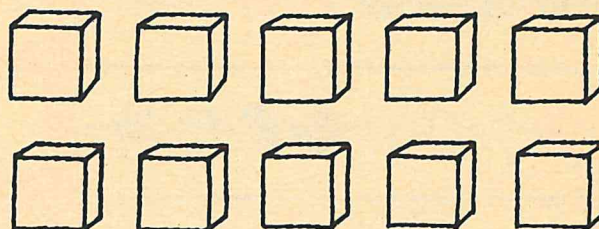
are 10.

Color 6 stars red.
Color 2 stars yellow.
Color the rest blue.



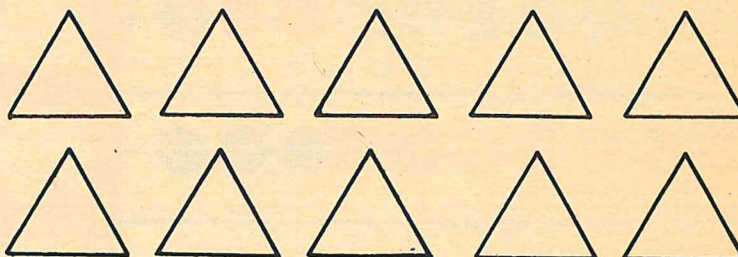
stars are blue. and and are 10.

Color 5 blocks pink.
Color 3 blocks yellow.
Color the rest green.



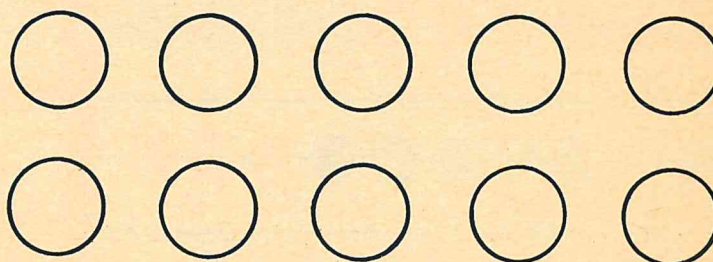
blocks are green. and and are 10.

Color 7 triangles purple.
Color 2 triangles orange.
Color the rest blue.



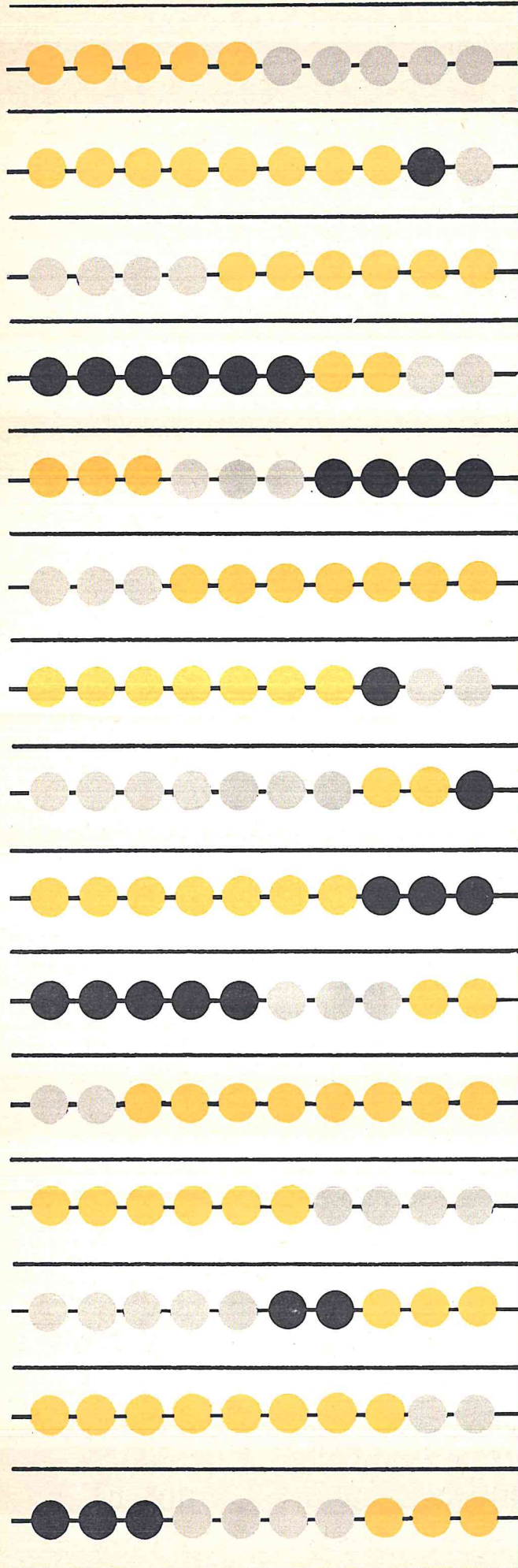
triangle is blue. and and are 10.

Color 4 circles black.
Color 3 circles yellow.
Color the rest blue.



circles are blue. and and are 10.

Write the number story of each picture.

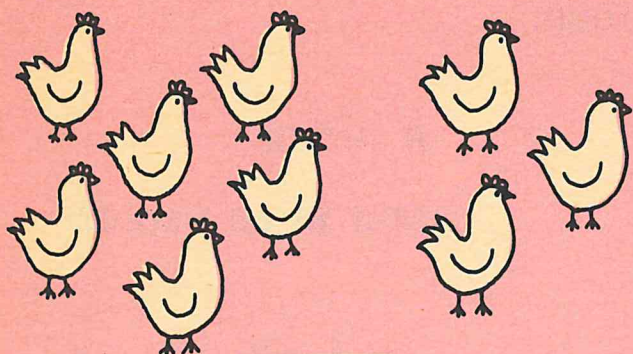


and are 10.
 and and are 10.
 and are 10.
 and and are 10.
 and and are 10.
 and are 10.
 and and are 10.
 and and are 10.
 and are 10.
 and are 10.
 and and are 10.
 and are 10.
 and and are 10.

Guessing and Counting

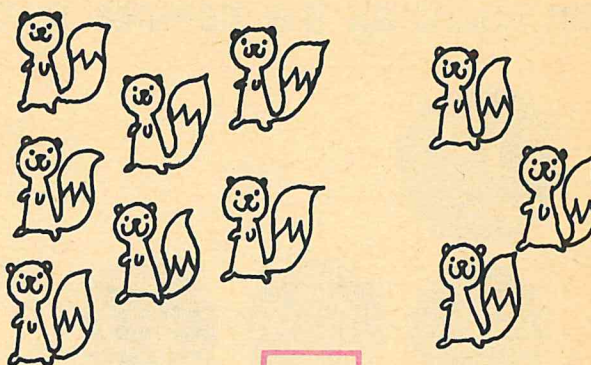
Guess how many animals are in each picture.

Then count the animals to see if your guess was right.



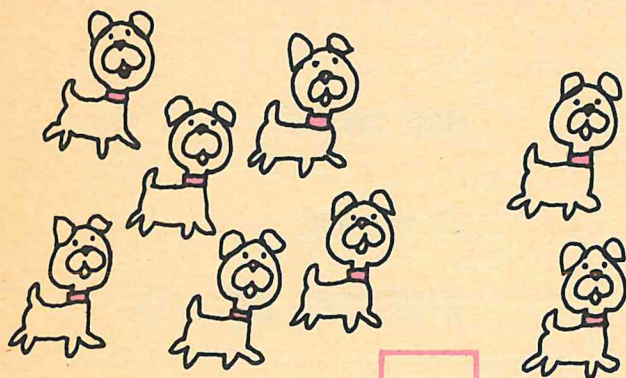
You guessed chickens.

You counted chickens.



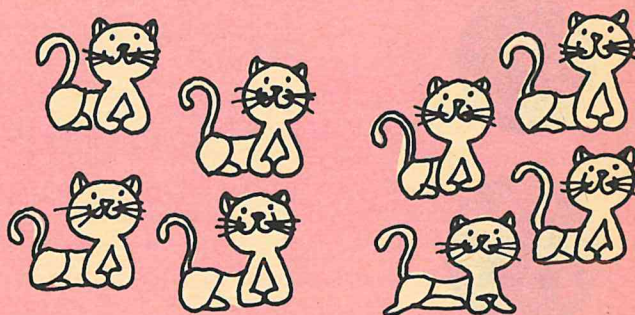
You guessed squirrels.

You counted squirrels.



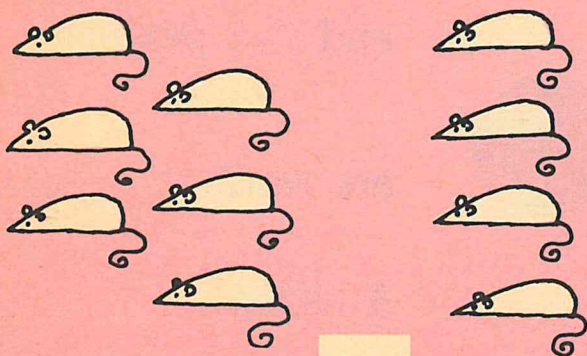
You guessed dogs.

You counted dogs.



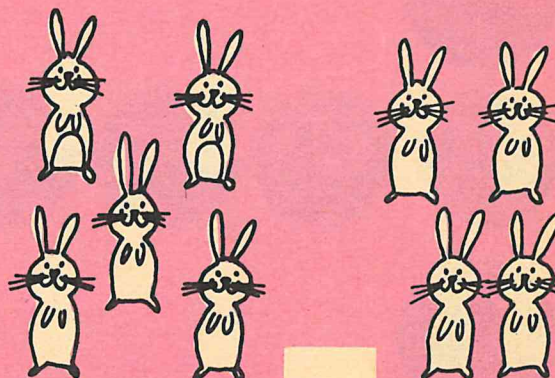
You guessed cats.

You counted cats.



You guessed mice.

You counted mice.



You guessed rabbits.

You counted rabbits.

Exchanging a Nickel for Pennies

In each group of coins, cross out the nickel.

Draw five pennies to take the place of the nickel.

Then count all the pennies in the group.



A nickel
and three pennies

are worth ¢.



A nickel
and one penny

are worth ¢.



A nickel
and two pennies

are worth ¢.



A nickel
and five pennies

are worth ¢.



A nickel
and four pennies

are worth ¢.

Dime



A dime is worth ten cents.

A dime will buy the same things that ten pennies will buy.



A nickel can take the place of five pennies.

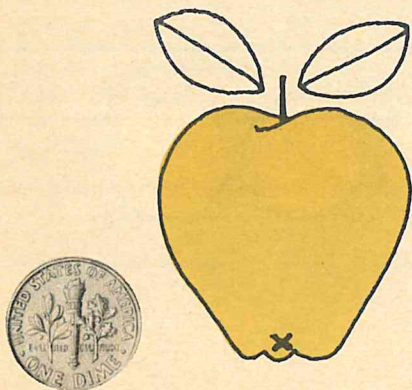


nickels can take the place of ten pennies.

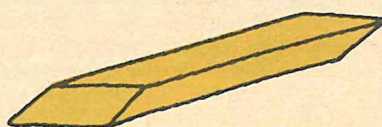
A dime is worth  nickels.

The coins under each thing tell you the price.

Write the price on the price tag.



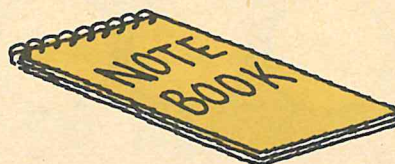
Price



Price



Price



Price



Counting

To count up to 10, starting with 3, say 3, 4, 5, 6, 7, 8, 9, 10.

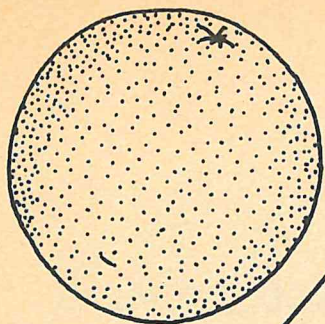
Count up to ten in each box.

Start with the number printed in the first circle of the box.

Write the higher numbers in the other circles.

4 5 6 7 8 9 10	2
5	3
6	7
9	8
2	4
7	6

Making Change



Price



This orange was paid for with a dime.

A dime is worth 10 cents.

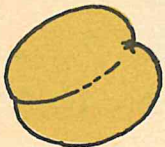
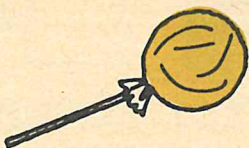
To count out the change,
start with 4 and count to 10.

Put down a penny for each number after 4.

The number of pennies change is 6.

Each thing below was paid for with a dime.

Count out the change, and write the amount of change.

 6¢ Price Change	 4¢ Price Change
 5¢ Price Change	 2¢ Price Change
 7¢ Price Change	 1¢ Price Change
 8¢ Price Change	 6¢ Price Change
 3¢ Price Change	 5¢ Price Change
 9¢ Price Change	 3¢ Price Change



Price

This one-cent stamp was paid for with a nickel.

A nickel is worth 5 cents.

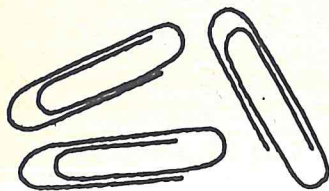
To count out the change,
start with 1 and count to 5.

Put down a penny for each number after 1.

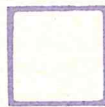
The number of pennies change is 4.

Each thing below was paid for with a nickel.

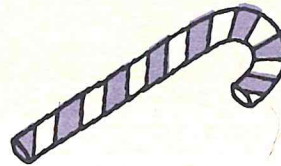
Count out the change, and write the amount of change.



Price



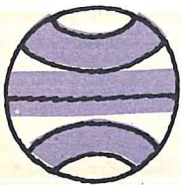
Change



Price



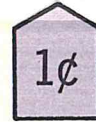
Change



Price



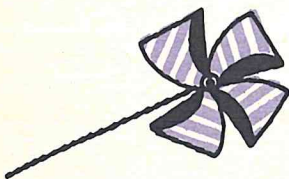
Change



Price



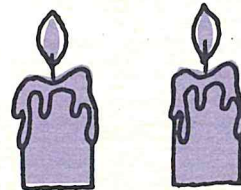
Change



Price



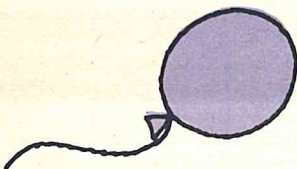
Change



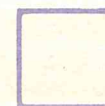
Price



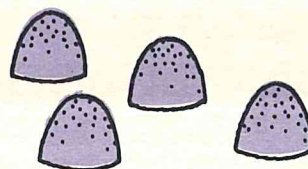
Change



Price



Change



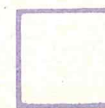
Price



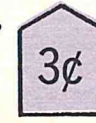
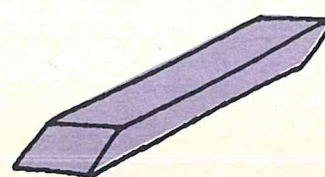
Change



Price



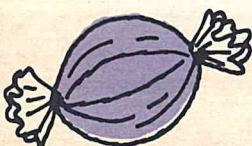
Change



Price



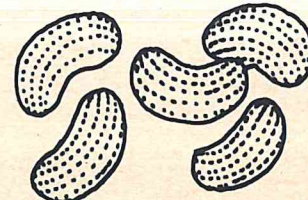
Change



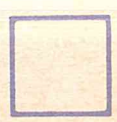
Price



Change



Price



Change

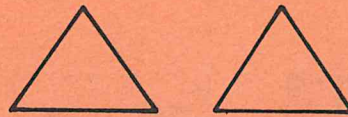
Adding One



Here is one star.

Draw one more star.

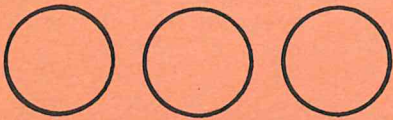
1 and 1 are



Here are two triangles.

Draw one more triangle.

2 and 1 are



Here are three circles.

Draw one more circle.

3 and 1 are



Here are four candles.

Draw one more candle.

4 and 1 are



Here are five flowers.

Draw one more flower.

5 and 1 are



Here are six lines.

Draw one more line.

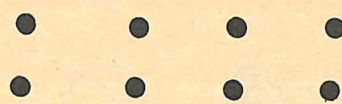
6 and 1 are



Here are seven bananas.

Draw one more banana.

7 and 1 are



Here are eight dots.

Draw one more dot.

8 and 1 are



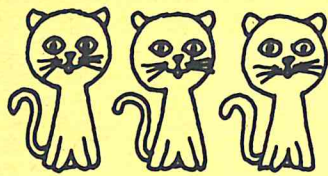
Here are nine beads.

— Draw one more bead.

9 and 1 are

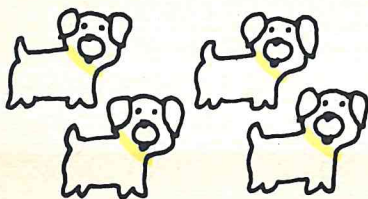
Adding Two

Trace over the dotted lines to add two to each group.



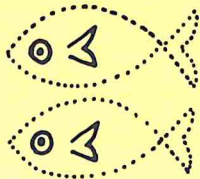
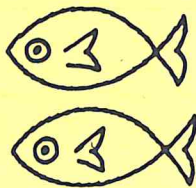
3 cats and 2 cats are cats.

3 and 2 are



4 dogs and 2 dogs are dogs.

4 and 2 are



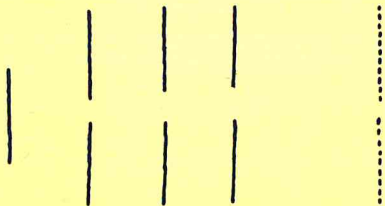
2 fish and 2 fish are fish.

2 and 2 are



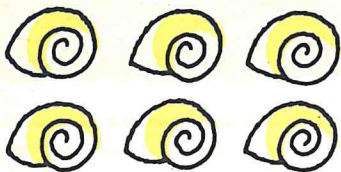
5 cups and 2 cups are cups.

5 and 2 are



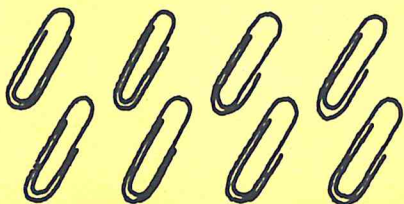
7 lines and 2 lines are lines.

7 and 2 are



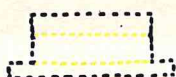
6 shells and 2 shells are shells.

6 and 2 are



8 clips and 2 clips are clips.

8 and 2 are

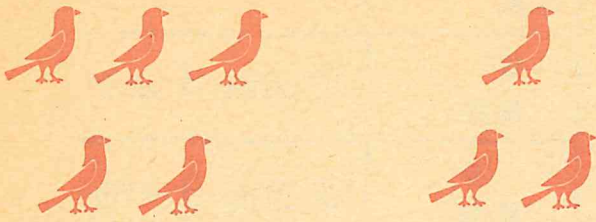


1 hat and 2 hats are hats.

1 and 2 are

Adding Three

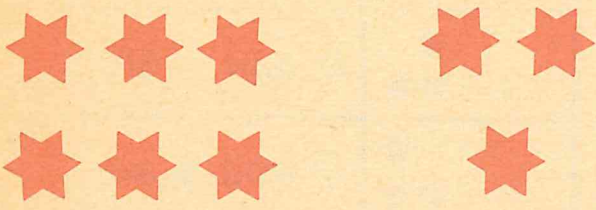
Put two groups together to make one large group.



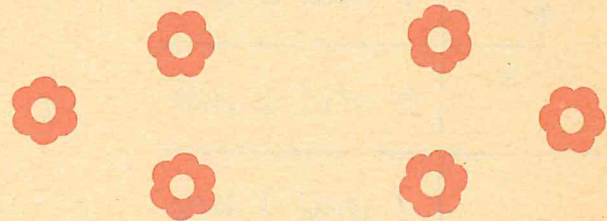
5 and 3 are



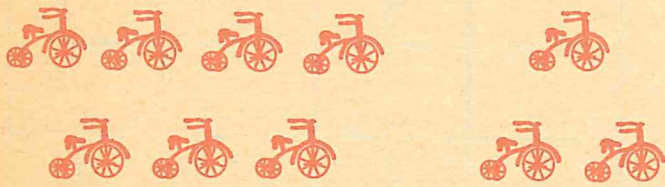
4 and 3 are



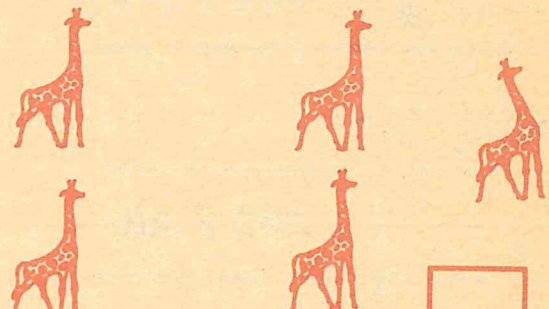
6 and 3 are



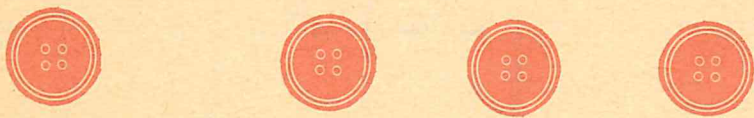
3 and 3 are



7 and 3 are



2 and 3 are



1 and 3 are

5 birds
and 3 birds
are birds

3 flowers
and 3 flowers
are flowers

4 leaves
and 3 leaves
are leaves

6 stars
and 3 stars
are stars

Addition Drill

Adding One

	1 and 1 are	
	2 and 1 are	
	3 and 1 are	
	4 and 1 are	
	5 and 1 are	
	6 and 1 are	
	7 and 1 are	
	8 and 1 are	
	9 and 1 are	

Adding Three

	1 and 3 are	
	2 and 3 are	
	3 and 3 are	
	4 and 3 are	
	5 and 3 are	
	6 and 3 are	
	7 and 3 are	

Add these numbers:

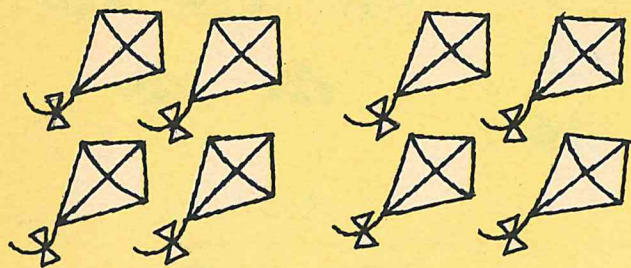
$\begin{array}{r} 3 \\ 1 \\ \hline \square \end{array}$	$\begin{array}{r} 2 \\ 3 \\ \hline \square \end{array}$	$\begin{array}{r} 5 \\ 2 \\ \hline \square \end{array}$	$\begin{array}{r} 4 \\ 1 \\ \hline \square \end{array}$
$\begin{array}{r} 6 \\ 3 \\ \hline \square \end{array}$	$\begin{array}{r} 8 \\ 1 \\ \hline \square \end{array}$	$\begin{array}{r} 3 \\ 3 \\ \hline \square \end{array}$	$\begin{array}{r} 9 \\ 1 \\ \hline \square \end{array}$
$\begin{array}{r} 6 \\ 2 \\ \hline \square \end{array}$	$\begin{array}{r} 4 \\ 2 \\ \hline \square \end{array}$	$\begin{array}{r} 5 \\ 1 \\ \hline \square \end{array}$	$\begin{array}{r} 8 \\ 2 \\ \hline \square \end{array}$
$\begin{array}{r} 6 \\ 1 \\ \hline \square \end{array}$	$\begin{array}{r} 7 \\ 2 \\ \hline \square \end{array}$	$\begin{array}{r} 7 \\ 1 \\ \hline \square \end{array}$	$\begin{array}{r} 4 \\ 3 \\ \hline \square \end{array}$
$\begin{array}{r} 1 \\ 3 \\ \hline \square \end{array}$	$\begin{array}{r} 7 \\ 3 \\ \hline \square \end{array}$	$\begin{array}{r} 5 \\ 3 \\ \hline \square \end{array}$	$\begin{array}{r} 3 \\ 2 \\ \hline \square \end{array}$

Adding Two

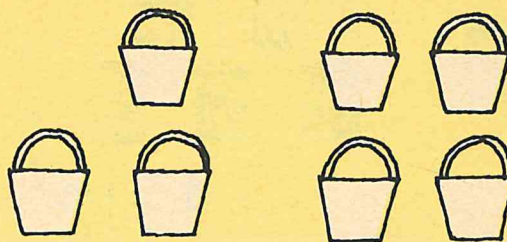
	1 and 2 are	
	2 and 2 are	
	3 and 2 are	
	4 and 2 are	
	5 and 2 are	
	6 and 2 are	
	7 and 2 are	
	8 and 2 are	

Adding Four

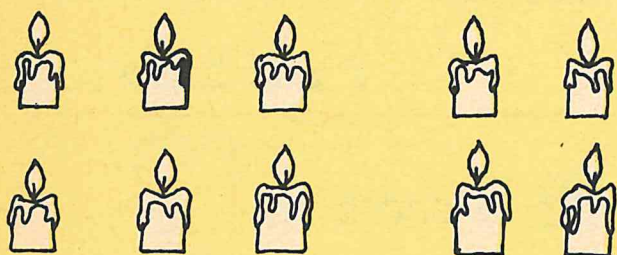
Put two groups together to make one large group.



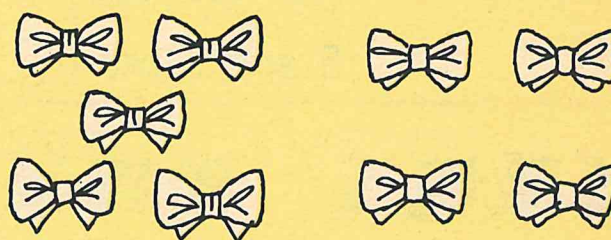
4 and 4 are



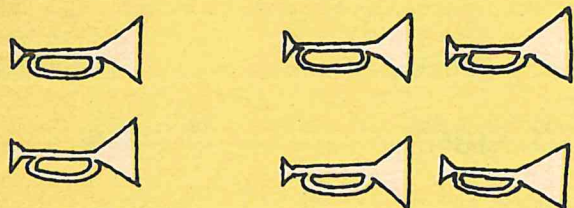
3 and 4 are



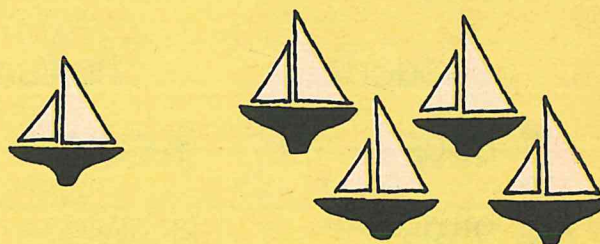
6 and 4 are



5 and 4 are



2 and 4 are



1 and 4 are

3 pails

4 pails



pails

6 candles

4 candles



candles

2 horns

4 horns



horns

1 boat

4 boats



boats

4 kites

4 kites



kites

6 cups

4 cups



cups

5 bows

4 bows



bows

5 squirrels

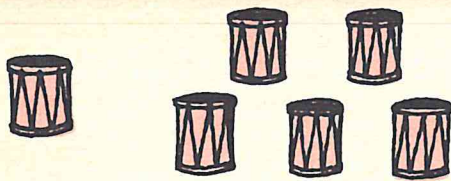
4 squirrels



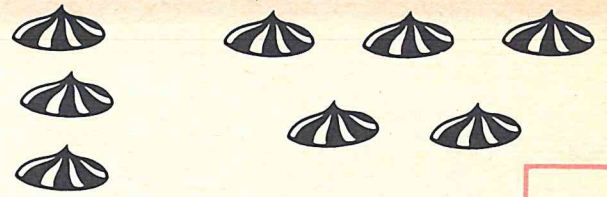
squirrels

Adding Five

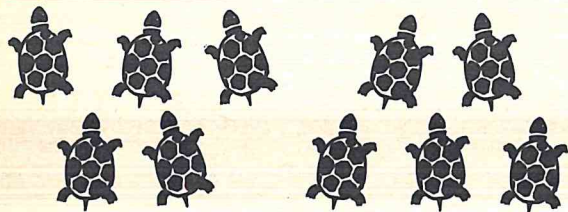
Put two groups together to make one large group.



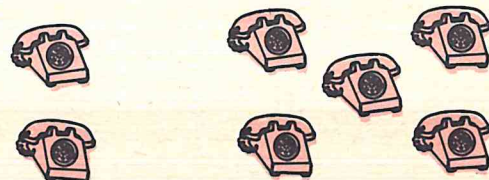
1 and 5 are



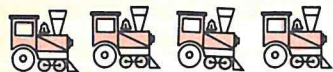
3 and 5 are



5 and 5 are



2 and 5 are



4 and 5 are

3 spoons

5 spoons

spoons

1 flower

5 flowers

flowers

5 hats

5 hats

hats

3 marbles

5 marbles

marbles

2 birds

5 birds

birds

3 cups

5 cups

cups

5 stars

5 stars

stars

2 pins

5 pins

pins

5 cats

5 cats

cats

4 houses

5 houses

houses

2 cents

5 cents

cents

3 ducks

5 ducks

ducks

4 plates

5 plates

plates

2 dogs

5 dogs

dogs

4 bats

5 bats

bats

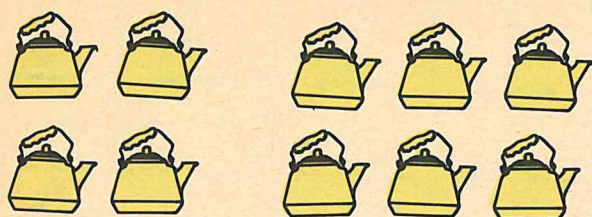
1 ant

5 ants

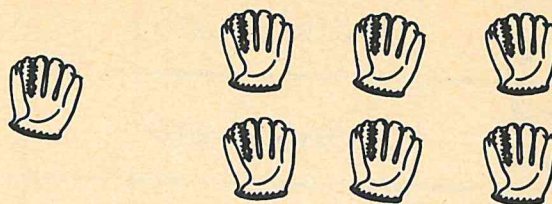
ants

Adding Six

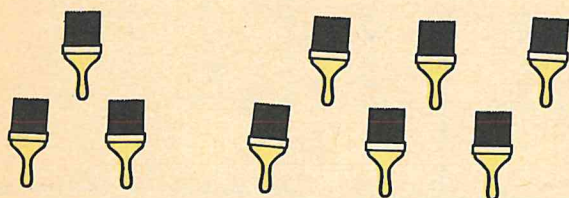
Put two groups together to make one large group.



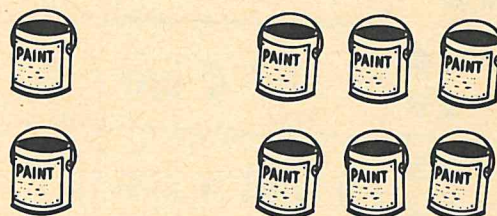
4 and 6 are



1 and 6 are



3 and 6 are



2 and 6 are

2 boats

6 boats

boats

4 hats

6 hats

hats

2 cups

6 cups

cups

3 cats

6 cats

cats

1 dish

6 dishes

dishes

1 spoon

6 spoons

spoons

2 bottles

6 bottles

bottles

3 fish

6 fish

fish

2 bats

6 bats

bats

1 balloon

6 balloons

balloons

3 pots

6 pots

pots

4 hands

6 hands

hands

4 dogs

6 dogs

dogs

1 card

6 cards

cards

3 legs

6 legs

legs

4 pens

6 pens

pens

Addition Drill

Adding Four

	1 and 4 are	
	2 and 4 are	
	3 and 4 are	
	4 and 4 are	
	5 and 4 are	
	6 and 4 are	

Adding Five

	1 and 5 are	
	2 and 5 are	
	3 and 5 are	
	4 and 5 are	
	5 and 5 are	

Adding Six

	1 and 6 are	
	2 and 6 are	
	3 and 6 are	
	4 and 6 are	

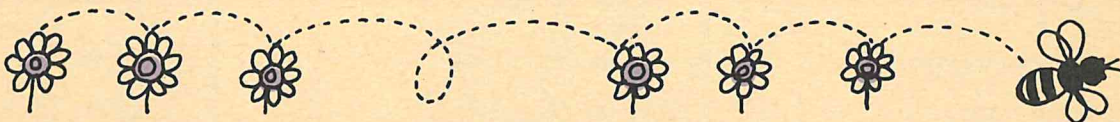
Add these numbers:

$\begin{array}{r} 1 \\ 4 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ 5 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ 4 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ 3 \\ \hline \end{array}$
$\begin{array}{r} 7 \\ 2 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ 6 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ 2 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ 5 \\ \hline \end{array}$
$\begin{array}{r} 4 \\ 1 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ 3 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ 6 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ 2 \\ \hline \end{array}$
$\begin{array}{r} 9 \\ 1 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ 4 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ 5 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ 1 \\ \hline \end{array}$
$\begin{array}{r} 1 \\ 6 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ 3 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ 4 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ 1 \\ \hline \end{array}$
$\begin{array}{r} 5 \\ 2 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ 5 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ 1 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ 6 \\ \hline \end{array}$
$\begin{array}{r} 4 \\ 3 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ 4 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ 3 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ 2 \\ \hline \end{array}$
$\begin{array}{r} 2 \\ 2 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ 1 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ 2 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ 4 \\ \hline \end{array}$
$\begin{array}{r} 2 \\ 3 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ 3 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ 5 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ 1 \\ \hline \end{array}$

Add these numbers:

2 and 3 are		1 and 5 are		3 and 6 are	
6 and 2 are		3 and 1 are		5 and 5 are	
6 and 1 are		2 and 4 are		4 and 2 are	
1 and 1 are		5 and 4 are		1 and 3 are	
8 and 2 are		7 and 3 are		4 and 1 are	
3 and 5 are		9 and 1 are		1 and 6 are	
6 and 3 are		8 and 1 are		5 and 3 are	
2 and 1 are		6 and 4 are		3 and 3 are	
5 and 1 are		4 and 3 are		7 and 1 are	
1 and 2 are		4 and 4 are		1 and 4 are	
2 and 5 are		3 and 4 are		4 and 6 are	
4 and 5 are		2 and 6 are		7 and 2 are	

Add.



$\begin{array}{r} 1 \\ 6 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ 5 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ 6 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ 1 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ 4 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ 2 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ 1 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ 6 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ 5 \\ \hline \end{array}$
$\begin{array}{r} 6 \\ 4 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ 4 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ 4 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ 5 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ 7 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ 5 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ 3 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ 7 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ 6 \\ \hline \end{array}$

The Sign +

plus means and

+ means plus

equals means are

= means equals

1 and 1 are 2.	1 plus 1 equals 2.	$1 + 1 = 2$
2 and 1 are 3.	2 plus 1 equals 3.	$2 + 1 = 3$
3 and 1 are 4.	3 plus 1 equals 4.	$3 + 1 =$
3 and 2 are	3 plus 2 equals	$3 + 2 =$

Add these numbers:

$2 + 1 =$	
$5 + 4 =$	
$6 + 4 =$	
$1 + 1 =$	
$3 + 4 =$	
$1 + 2 =$	
$8 + 1 =$	
$3 + 6 =$	
$3 + 3 =$	
$8 + 2 =$	
$1 + 5 =$	
$5 + 1 =$	

$4 + 4 =$	
$7 + 1 =$	
$2 + 3 =$	
$1 + 4 =$	
$3 + 1 =$	
$4 + 5 =$	
$1 + 3 =$	
$7 + 3 =$	
$6 + 1 =$	
$4 + 2 =$	
$6 + 3 =$	
$3 + 5 =$	

$1 + 6 =$	
$4 + 6 =$	
$9 + 1 =$	
$7 + 2 =$	
$4 + 3 =$	
$2 + 6 =$	
$5 + 5 =$	
$6 + 2 =$	
$2 + 4 =$	
$5 + 3 =$	
$2 + 5 =$	
$4 + 1 =$	

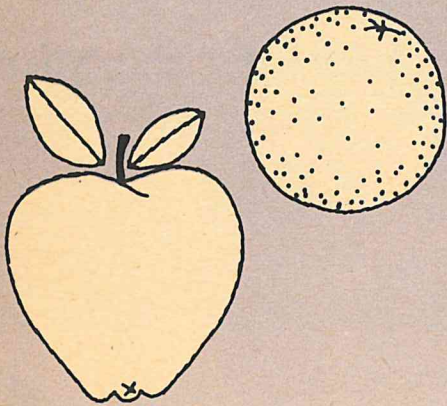
Problems in Addition

Fred had 2 cents.

His father gave him 3 more cents.

How many cents did Fred have then?

Answer:



John bought an orange that cost 4 cents and an apple that cost 4 cents.

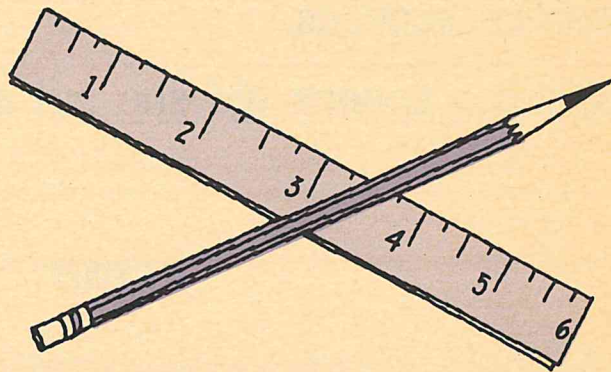
How much money did John pay?

Answer:

Ann bought a ruler for 5 cents and a pencil for 3 cents.

How much money did Ann pay?

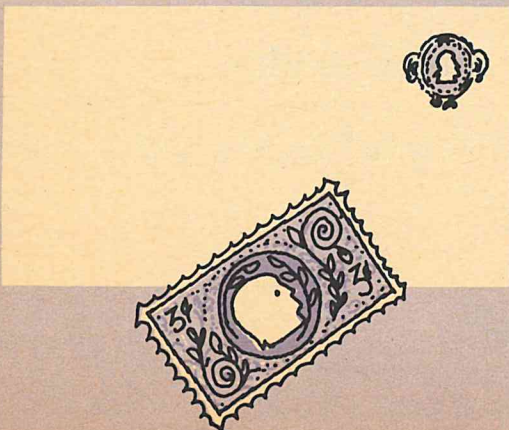
Answer:



Bob bought a postcard for 4 cents and a stamp for 3 cents.

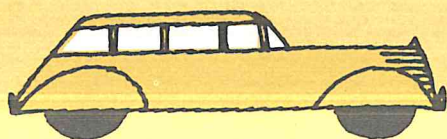
How much money did Bob pay?

Answer:



Tom used 6 large blocks
and 4 small blocks for his tower.
How many blocks did he use?

Answer:

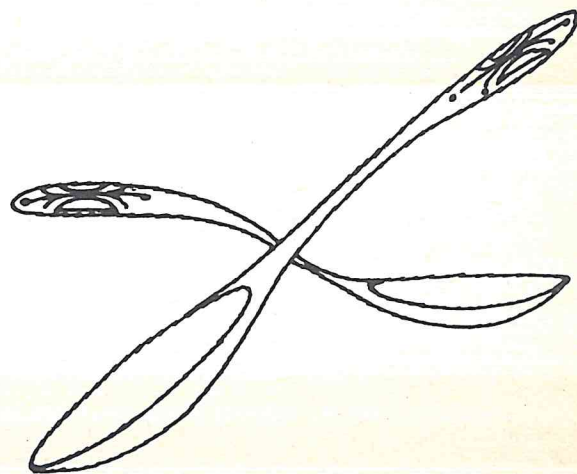


Mary traveled 7 hours by train
and 2 more hours by car.
How many hours did she travel?

Answer:

Jane put out 5 teaspoons
and 5 tablespoons.
How many spoons did she put out?

Answer:

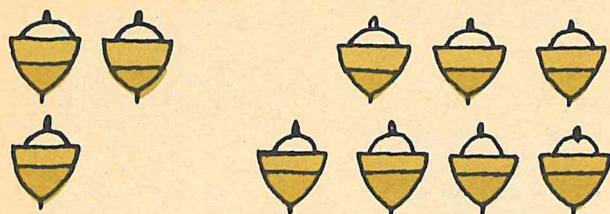


Bill washed 6 large windows
and 2 small windows.
How many windows did he wash?

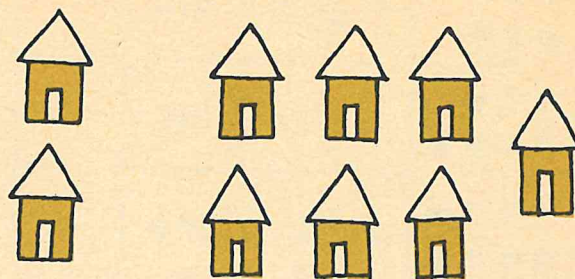
Answer:

Adding Seven, Eight, or Nine

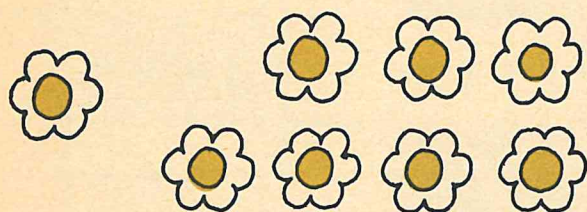
Put two groups together to make one large group.



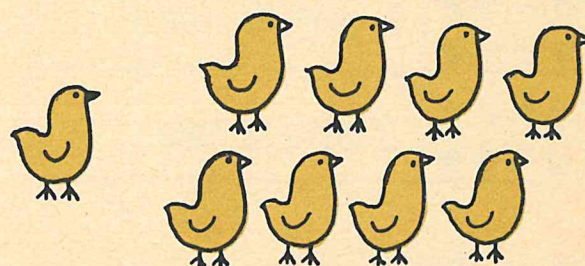
3 and 7 are



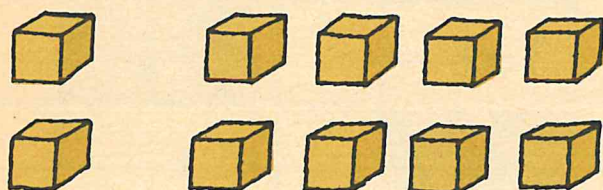
2 and 7 are



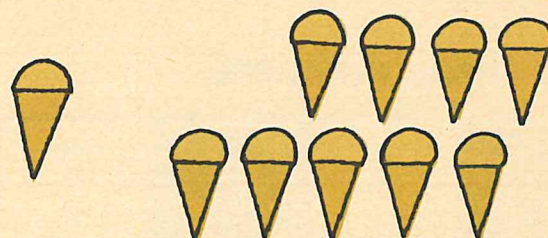
1 and 7 are



1 and 8 are



2 and 8 are



1 and 9 are

1 ball
+ 8 balls

 balls

3 cups
+ 7 cups

 cups

2 shoes
+ 8 shoes

 shoes

3 cats
+ 6 cats

 cats

2 stars
+ 7 stars

 stars

1 bird
+ 7 birds

 birds

1 pin
+ 9 pins

 pins

4 bats
+ 6 bats

 bats

Addition Drill

Adding Seven

	1 and 7 are	
	2 and 7 are	
	3 and 7 are	

Adding Eight

	1 and 8 are	
	2 and 8 are	

Adding Nine

	1 and 9 are	
--	-------------	--

Add these numbers:

$\begin{array}{r} 2 \\ 6 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ 5 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ 8 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ 7 \\ \hline \end{array}$
$\begin{array}{r} 1 \\ 5 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ 7 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ 6 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ 4 \\ \hline \end{array}$
$\begin{array}{r} 3 \\ 7 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ 5 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ 5 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ 9 \\ \hline \end{array}$
$\begin{array}{r} 2 \\ 8 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ 6 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ 6 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ 5 \\ \hline \end{array}$

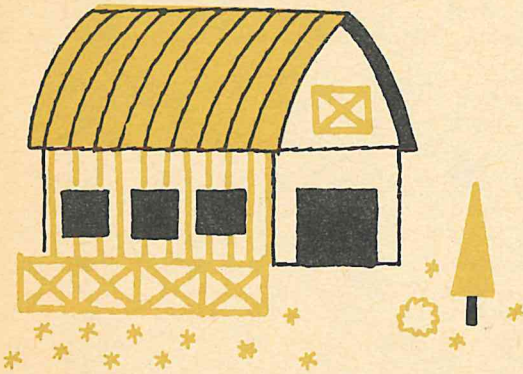
Add these numbers:

$1 + 9 =$		$2 + 7 =$	
$1 + 8 =$		$3 + 7 =$	
$1 + 7 =$		$2 + 8 =$	
$5 + 4 =$		$2 + 5 =$	
$1 + 6 =$		$4 + 6 =$	
$2 + 3 =$		$1 + 4 =$	
$3 + 5 =$		$2 + 6 =$	
$1 + 3 =$		$5 + 5 =$	
$3 + 4 =$		$4 + 4 =$	
$3 + 6 =$		$3 + 3 =$	
$4 + 3 =$		$1 + 2 =$	
$4 + 5 =$		$6 + 4 =$	
$5 + 2 =$		$6 + 3 =$	
$7 + 3 =$		$1 + 5 =$	
$6 + 2 =$		$3 + 2 =$	
$4 + 2 =$		$2 + 4 =$	
$2 + 2 =$		$5 + 3 =$	
$7 + 2 =$		$8 + 1 =$	

Problems in Addition

John has a nickel and 3 pennies.
How many cents are these coins worth?

Answer:



Jill was in the country
for a week and 3 days.
How many days was she in the country?

Answer:

If you use a toothpick
for each side,
how many toothpicks
make a square? Answer:

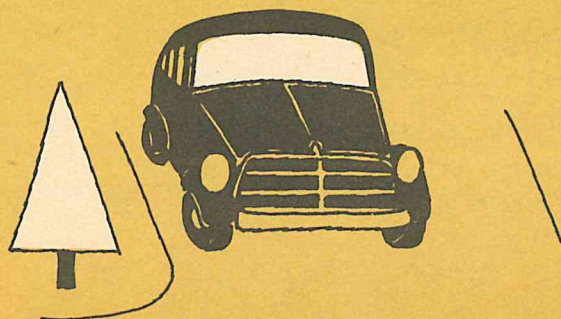
If you use a toothpick
for each side,
how many toothpicks
make a triangle? Answer:

How many toothpicks
do you need
to make both a square
and a triangle?

Answer:

There are 4 tires on the wheels.
There is a spare tire in the trunk.
How many tires does the car have?

Answer:



A long time ago, people saw

5 planets in the sky.

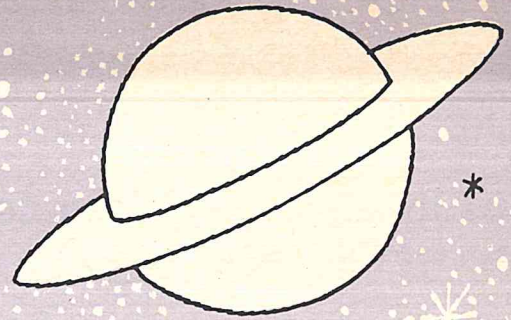
They were Mercury, Venus, Mars,
Jupiter, and Saturn.

Later, with telescopes,
they found 3 more.

They are Uranus, Neptune, and Pluto.

The earth is also a planet.

How many planets are there?



Answer:



John has 3 brothers and 2 sisters.

How many children are there
in John's family?

Answer:

In her toy chest Ann has

2 baseballs,

3 tennis balls,

and 2 rubber balls.

How many balls does she have?



Answer:

Numbers in Series

Write the numbers from one to ten, in order.

--	--	--	--	--	--	--	--	--	--

Add these numbers:

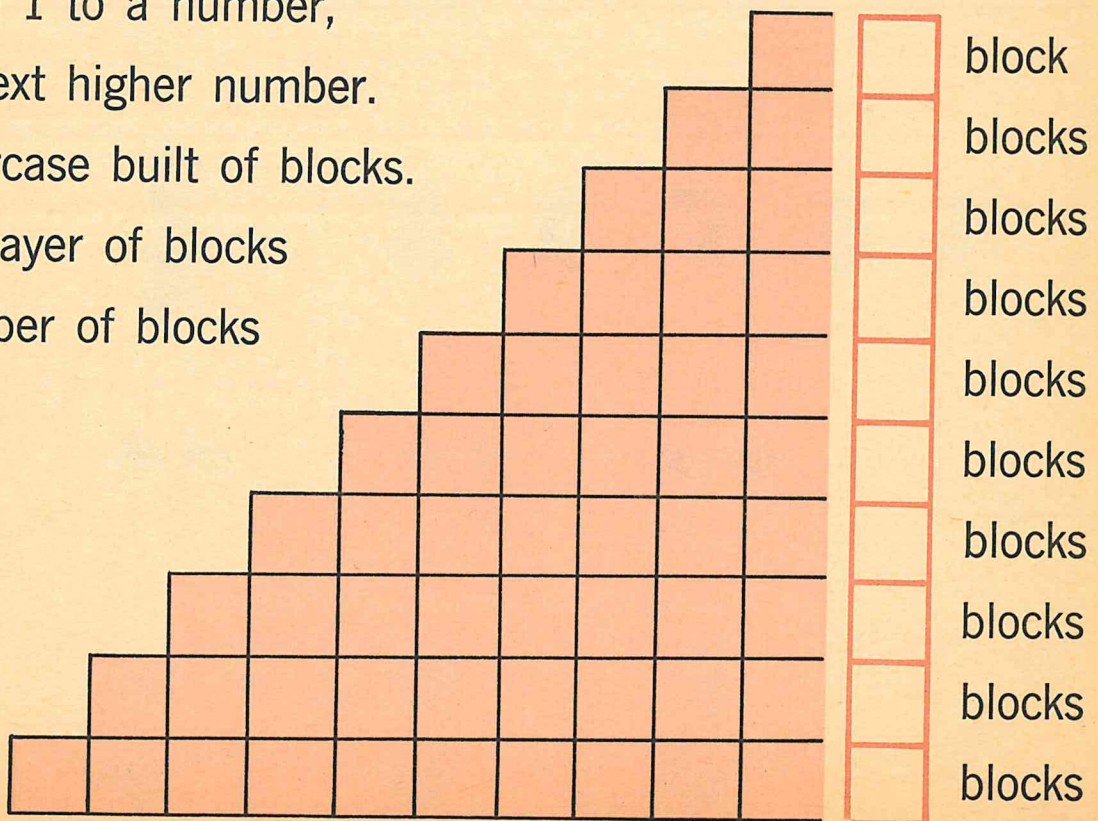
$\frac{1}{1}$	$\frac{2}{1}$	$\frac{3}{1}$	$\frac{4}{1}$	$\frac{5}{1}$	$\frac{6}{1}$	$\frac{7}{1}$	$\frac{8}{1}$	$\frac{9}{1}$

The next number after 8 is		$8 + 1 =$	
The next number after 6 is		$6 + 1 =$	
The next number after 4 is		$4 + 1 =$	
The next number after 7 is		$7 + 1 =$	

When you add 1 to a number,
you get the next higher number.

Here is a staircase built of blocks.

Next to each layer of blocks
write the number of blocks
that are in it.



Counting by Twos

The number on each flag tells
how many pigs are to the left of it:



2



4



6



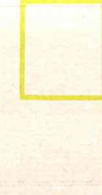
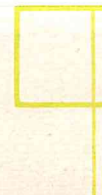
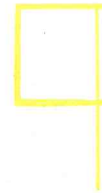
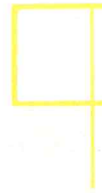
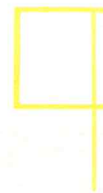
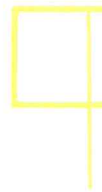
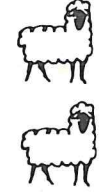
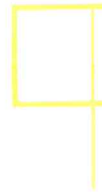
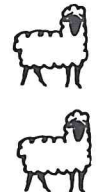
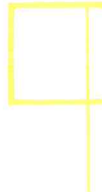
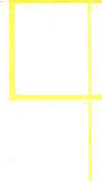
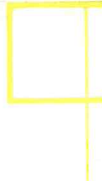
8



10



Write on each flag the number of things,
that are to the left of it.



5 and 1 are		5 and 1 and 1 are		5 and 2 are	
3 and 1 are		3 and 1 and 1 are		3 and 2 are	
7 and 1 are		7 and 1 and 1 are		7 and 2 are	
4 and 1 are		4 and 1 and 1 are		4 and 2 are	
2 and 1 are		2 and 1 and 1 are		2 and 2 are	
6 and 1 are		6 and 1 and 1 are		6 and 2 are	
8 and 1 are		8 and 1 and 1 are		8 and 2 are	

Adding 2 to a number is like adding 1 and 1 to the number.
Start at the left.

Add 2 to the number in each box,
and put the answer in the box after it.

2				
1				

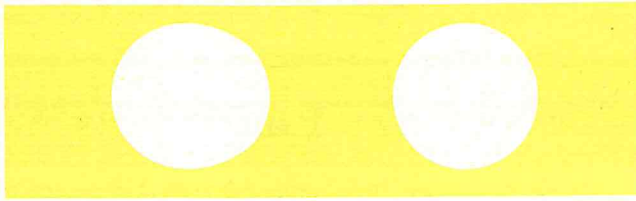
Write the numbers you get when you count by twos,
starting with the number in the first box.

3			
2			
4			
1			

Taking Away One

Minus means take away.

2 minus 1 means start with 2 and take away 1.



Here are 2 circles.

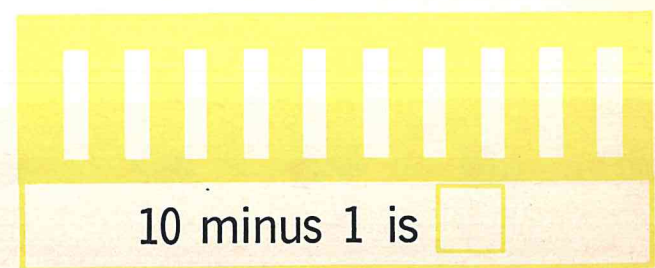
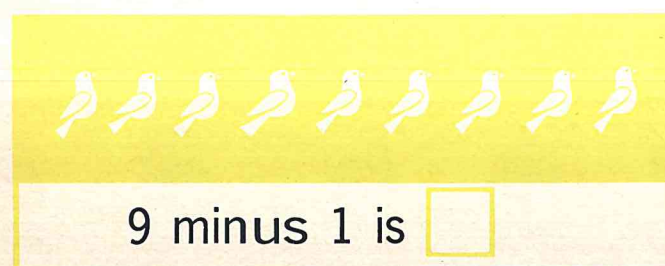
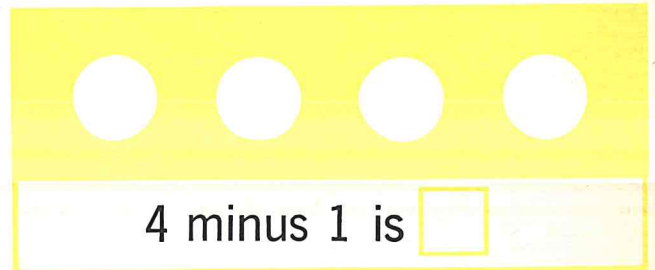
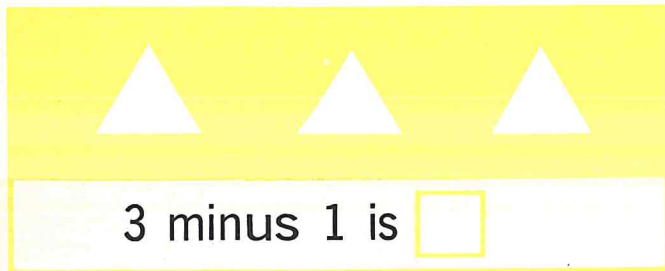
Take away 1 circle

by filling it in with green crayon.

2 circles minus 1 circle is circle.

2 minus 1 is

In each group of things, take away one by filling it in with green.



Taking Away Two

In each group fill in two things with green crayon.



5 minus 2 is



6 minus 2 is



4 minus 2 is



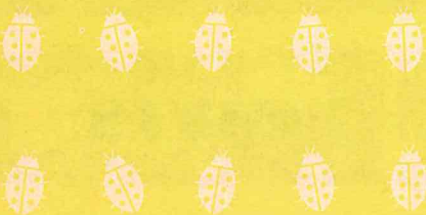
7 minus 2 is



9 minus 2 is



8 minus 2 is



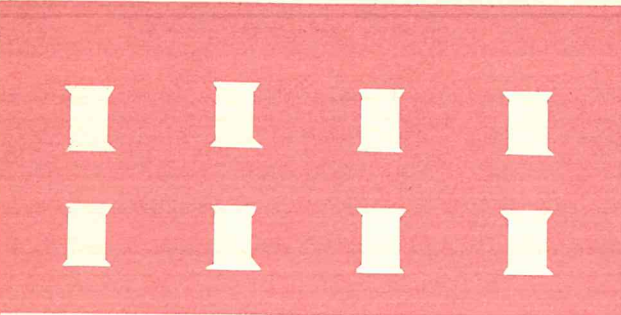
10 minus 2 is



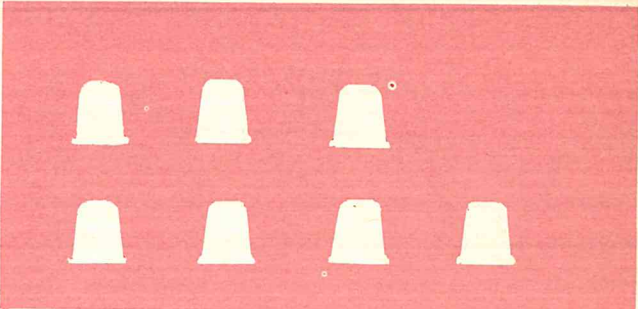
3 minus 2 is

Taking Away Three

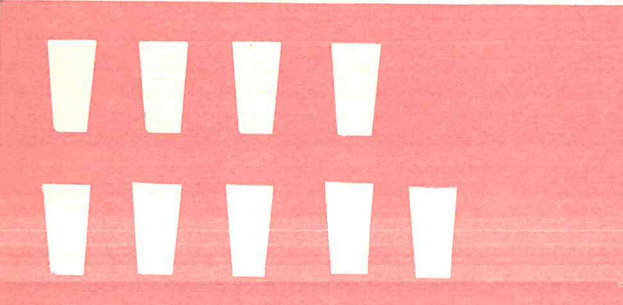
In each group fill in three things with red crayon.



8 minus 3 is



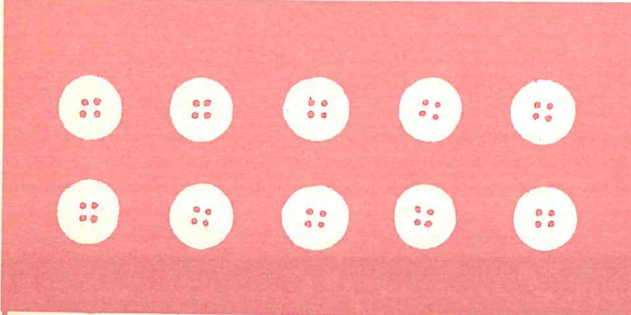
7 minus 3 is



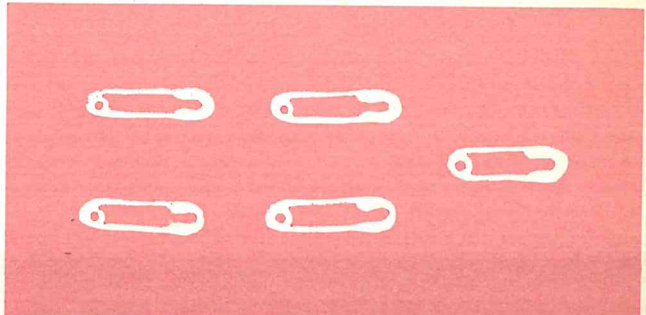
9 minus 3 is



6 minus 3 is



10 minus 3 is



5 minus 3 is



4 minus 3 is

8 minus 3 is

6 minus 3 is

7 minus 3 is

9 minus 3 is

5 minus 3 is

4 minus 3 is

Subtraction Drill

Fill in one.

	2 minus 1 is	
	3 minus 1 is	
	4 minus 1 is	
	5 minus 1 is	
	6 minus 1 is	
	7 minus 1 is	
	8 minus 1 is	
	9 minus 1 is	
	10 minus 1 is	

Fill in three.

	4 minus 3 is	
	5 minus 3 is	
	6 minus 3 is	
	7 minus 3 is	
	8 minus 3 is	
	9 minus 3 is	
	10 minus 3 is	

— means minus.

2 — 1 means 2 minus 1.

Fill in two.

	3 minus 2 is	
	4 minus 2 is	
	5 minus 2 is	
	6 minus 2 is	
	7 minus 2 is	
	8 minus 2 is	
	9 minus 2 is	
	10 minus 2 is	

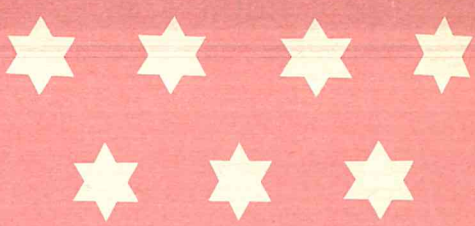
4 — 1 =		5 — 3 =	
7 — 2 =		5 — 1 =	
9 — 3 =		9 — 1 =	
6 — 3 =		10 — 1 =	
8 — 2 =		6 — 2 =	
6 — 1 =		10 — 2 =	
7 — 1 =		9 — 2 =	
8 — 1 =		7 — 3 =	
4 — 3 =		10 — 3 =	

Taking Away Four

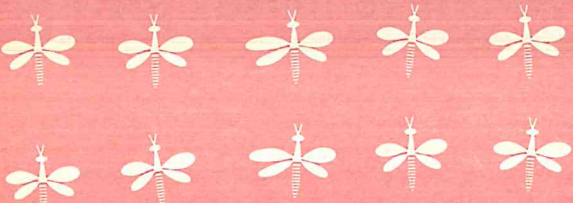
In each group fill in four things with red crayon.



8 minus 4 is



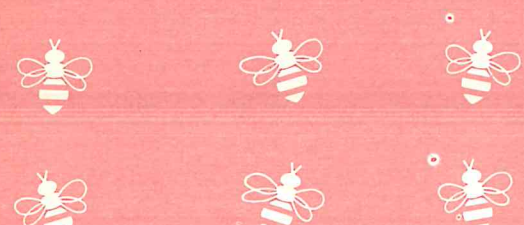
7 minus 4 is



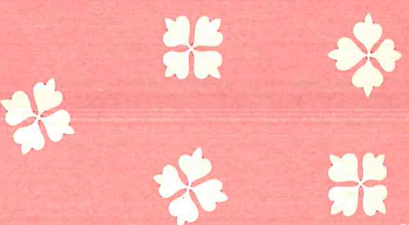
10 minus 4 is



9 minus 4 is



6 minus 4 is



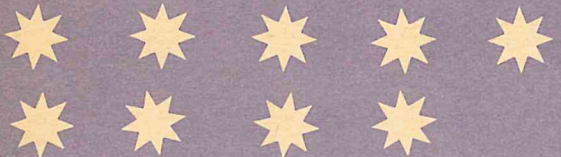
5 minus 4 is

Take away the lower number from the upper number.

7 spoons -4 spoons spoons	10 candles - 4 candles candles	6 rabbits -4 rabbits rabbits	5 cents -4 cents cent
8 kites -4 kites kites	10 cups - 4 cups cups	9 hats -4 hats hats	9 squirrels -4 squirrels squirrels

Taking Away Five

In each group fill in five things with purple crayon.



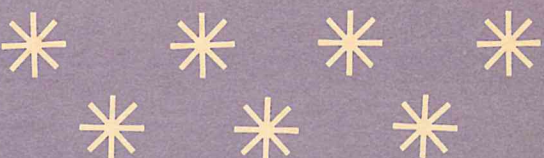
9 minus 5 is



8 minus 5 is



10 minus 5 is



7 minus 5 is



6 minus 5 is

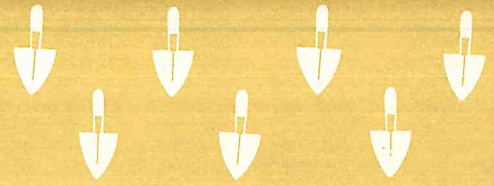
8 spoons -5 spoons spoons	6 flowers -5 flowers flower	10 hats - 5 hats hats	8 marbles -5 marbles marbles
7 birds -5 birds birds	8 cups -5 cups cups	10 stars - 5 stars stars	7 pins -5 pins pins
10 cats - 5 cats cats	9 houses -5 houses houses	7 cents -5 cents cents	8 ducks -5 ducks ducks
9 plates -5 plates plates	7 dogs -5 dogs dogs	9 bats -5 bats bats	6 ants -5 ants ant

Taking Away Six

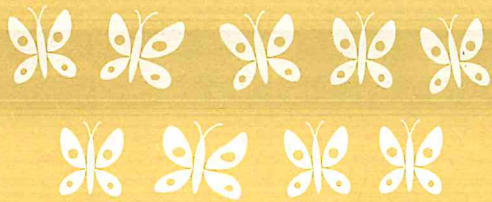
In each group fill in six things with brown crayon.



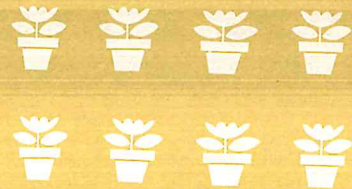
10 minus 6 is



7 minus 6 is



9 minus 6 is



8 minus 6 is

8 boats
- 6 boats

 boats

10 hats
- 6 hats

 hats

8 cups
- 6 cups

 cups

9 cats
- 6 cats

 cats

7 dishes
- 6 dishes

 dish

10 dogs
- 6 dogs

 dogs

7 spoons
- 6 spoons

 spoon

8 bottles
- 6 bottles

 bottles

9 fish
- 6 fish

 fish

8 bats
- 6 bats

 bats

7 balloons
- 6 balloons

 balloon

9 pots
- 6 pots

 pots

10 hands
- 6 hands

 hands

7 cards
- 6 cards

 card

9 legs
- 6 legs

 legs

10 pens
- 6 pens

 pens

Taking Away Seven, Eight, or Nine

Fill in seven bowls with purple.



10 minus 7 is

Fill in seven stars with purple.



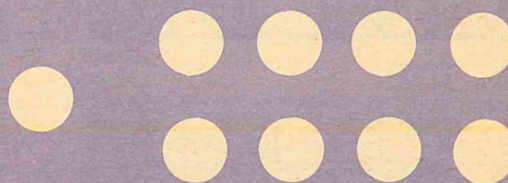
9 minus 7 is

Fill in seven birds with purple.



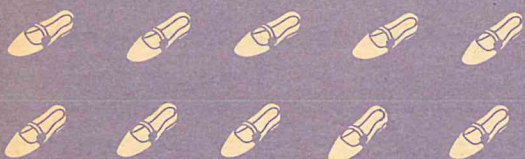
8 minus 7 is

Fill in eight circles with purple.



9 minus 8 is

Fill in eight shoes with purple.



10 minus 8 is

Fill in nine bottles with purple.



10 minus 9 is

9 balls

– 8 balls

ball

10 cups

– 7 cups

cups

10 shoes

– 8 shoes

shoes

8 hats

– 6 hats

hats

9 stars

– 7 stars

stars

8 birds

– 7 birds

bird

10 bottles

– 9 bottles

bottle

9 cats

– 6 cats

cats

Subtraction Drill

Fill in four.

	5 minus 4 is	
	6 minus 4 is	
	7 minus 4 is	
	8 minus 4 is	
	9 minus 4 is	
	10 minus 4 is	

Fill in five.

	6 minus 5 is	
	7 minus 5 is	
	8 minus 5 is	
	9 minus 5 is	
	10 minus 5 is	

Fill in six.

	7 minus 6 is	
	8 minus 6 is	
	9 minus 6 is	
	10 minus 6 is	

Fill in seven.

	8 minus 7 is	
	9 minus 7 is	
	10 minus 7 is	

Fill in eight.

	9 minus 8 is	
	10 minus 8 is	

Fill in nine.

	10 minus 9 is	
--	---------------	--

10 - 5 =		7 - 6 =	
10 - 3 =		6 - 5 =	
6 - 4 =		9 - 5 =	
8 - 4 =		9 - 8 =	
8 - 6 =		9 - 7 =	
8 - 5 =		10 - 6 =	
10 - 9 =		7 - 4 =	
7 - 2 =		9 - 3 =	

$\begin{array}{r} 10 \\ - 4 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ - 8 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ - 4 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ - 7 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ - 4 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ - 6 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ - 5 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ - 7 \\ \hline \end{array}$
--	--	---	--	---	---	---	---

Problems in Subtraction



John had 4 pennies.

He spent 2 pennies.

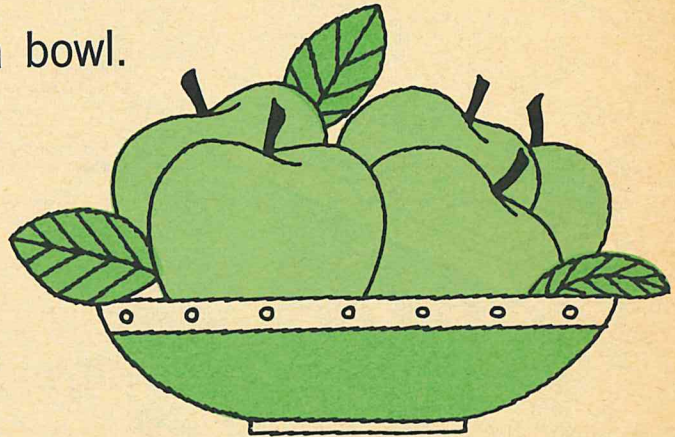
How many pennies were left?

Answer:

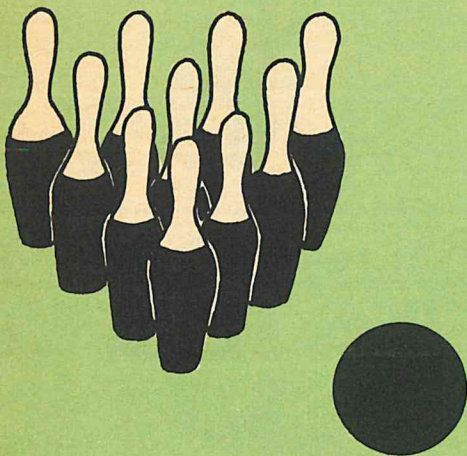
Mary's mother put 5 apples into a bowl.

3 apples were eaten.

How many apples were left?



Answer:



Tom was bowling with 10 pins.

He knocked down 7 pins.

How many pins were left standing?

Answer:

6 birds were sitting on a tree.

4 birds flew away.

How many birds were left?

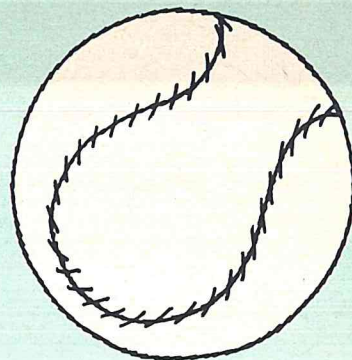


Answer:

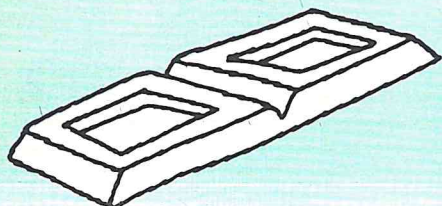
Bill needs 10 cents to buy a ball.

He has 4 cents already.

How many more cents does he need?



Answer:



John bought a penny bar of chocolate.

He paid for it with a nickel.

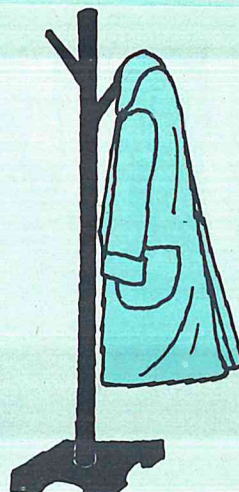
How many cents change should he get?

Answer:

There were 4 buttons on Tom's coat.

1 button was torn off.

How many buttons were left on the coat?



Answer:



8 people set out on a race.

2 of them dropped out.

How many were left in the race?

Answer:

Counting Backwards

Write the numbers from one to ten, in order.

--	--	--	--	--	--	--	--	--	--

When you read these numbers from right to left, you are counting backwards.

Count backwards from ten, and write the numbers in the boxes.

10									1
----	--	--	--	--	--	--	--	--	---

Take away 1.

10	9	8	7	6	5	4	3	2
- 1	- 1	- 1	- 1	- 1	- 1	- 1	- 1	- 1

The next number lower than 8 is		$8 - 1 =$	
The next number lower than 6 is		$6 - 1 =$	
The next number lower than 4 is		$4 - 1 =$	
The next number lower than 7 is		$7 - 1 =$	

When you take away 1 from a number, you get the next lower number.

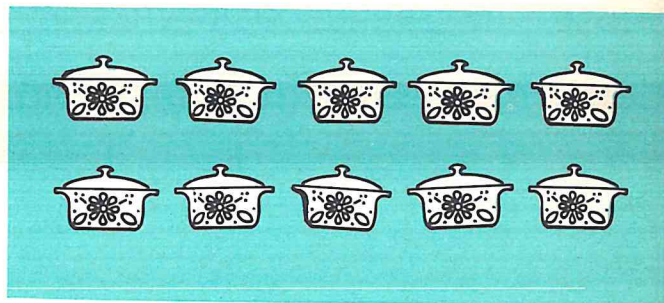
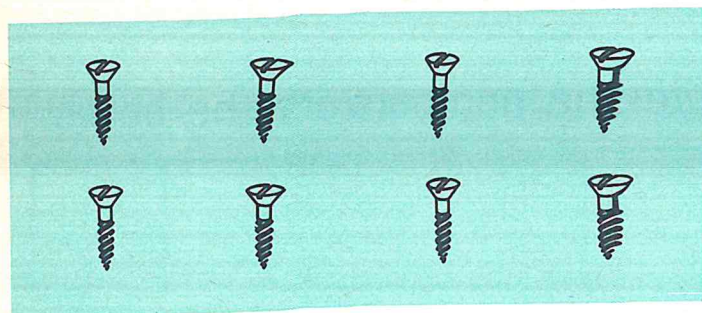
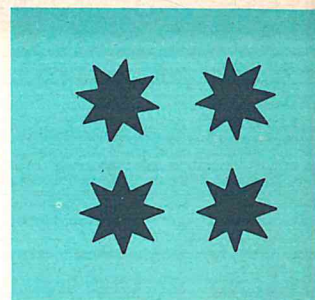
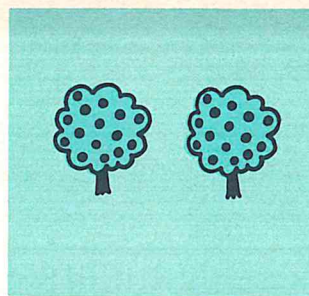
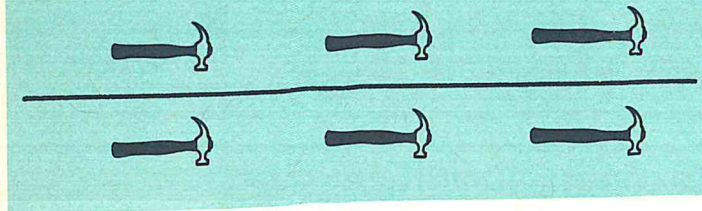
	is 1 less than 9.
	is 1 less than 5.

	is 1 less than 2.
	is 1 less than 3.

Half

Draw a line to cut each group in half.

Example:



Half of 2 is

Half of 4 is

Half of 6 is

Half of 8 is

Half of 10 is

3 is half of

1 is half of

4 is half of

5 is half of

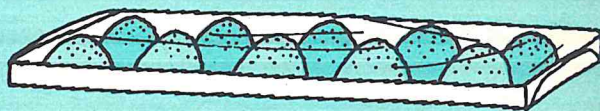
2 is half of

John bought 10 gum drops.

He gave his sister half of them.

How many gum drops did he give her?

Answer:



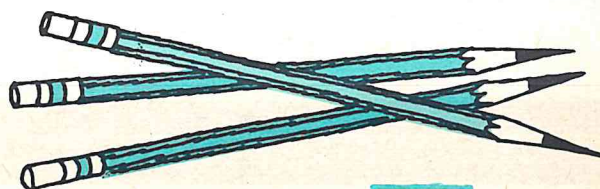
Mary bought some pencils.

She took half of them to school.

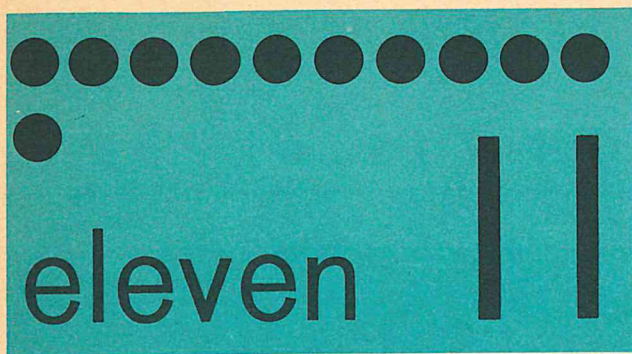
She took 3 pencils to school.

How many pencils had she bought?

Answer:



Meaning of Eleven and Twelve



One more than ten is called eleven.

Ten and one are eleven. $10 + 1 = 11$

One more than eleven is called twelve.

Twelve is more than ten.

Ten and are twelve.

$$10 + \text{} = 12$$

Write the numbers from 1 to 12, in order.

----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------

The next higher number after 10 is

The next lower number before 10 is

The next higher number after 11 is

The next lower number before 11 is

Count backwards from 12.

Write the numbers as you count.

12											1
----	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	---



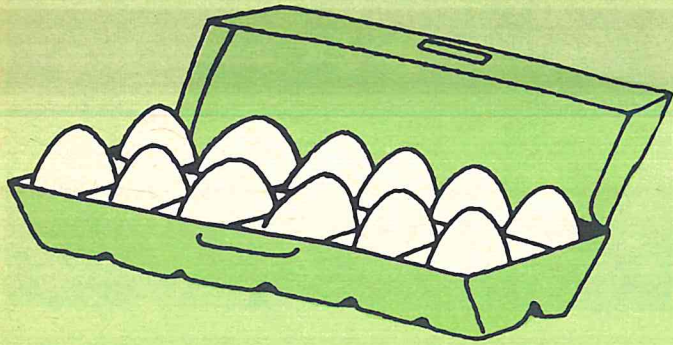
There are balls here.



There are balls in each line.

Half of 12 is

Dozen



A group of 12 things
is called a **dozen**.

A dozen eggs means eggs.

Half of 12 is

Half of a dozen is

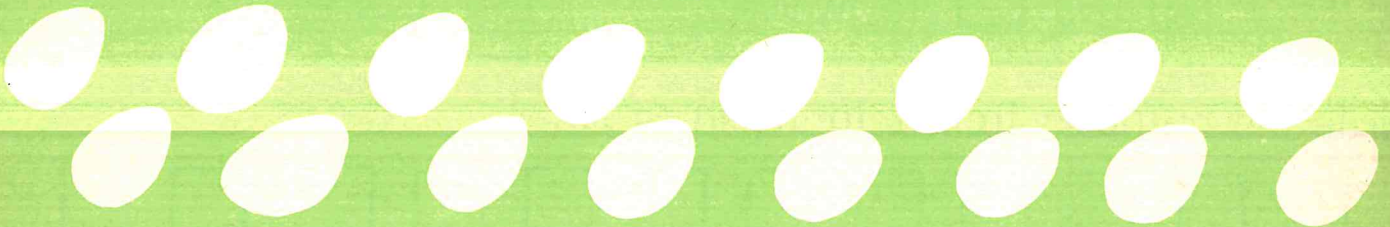
Half a dozen eggs

means eggs.

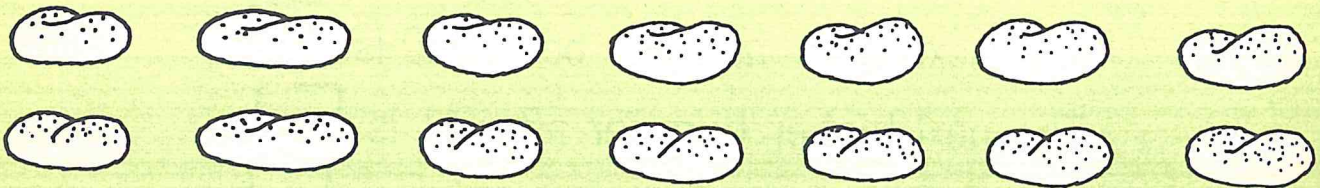
Half a dozen rolls

means rolls.

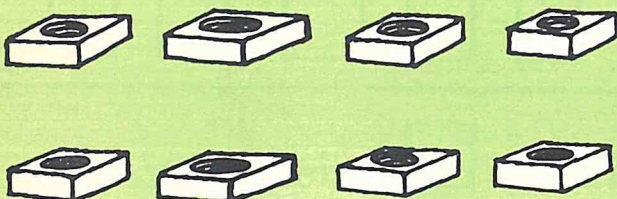
Draw a loop around a dozen eggs.



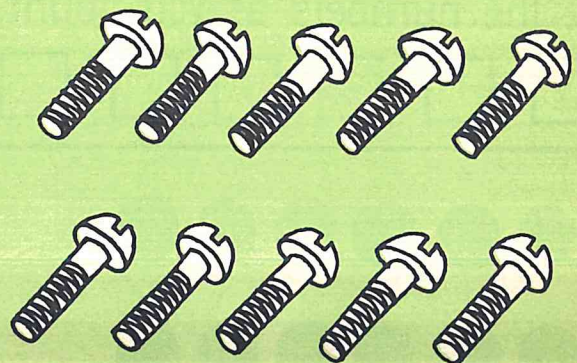
Draw a loop around a dozen rolls.



Draw a loop
around a half dozen nuts.



Draw a loop
around a half dozen bolts.



Foot Ruler

A foot ruler is divided into 12 equal parts.
Each part is called an **inch**.

There are inches in a **foot**.

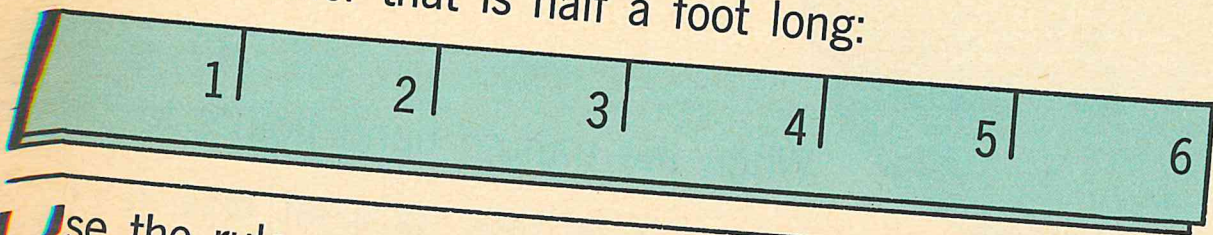
An inch is this long:

inch

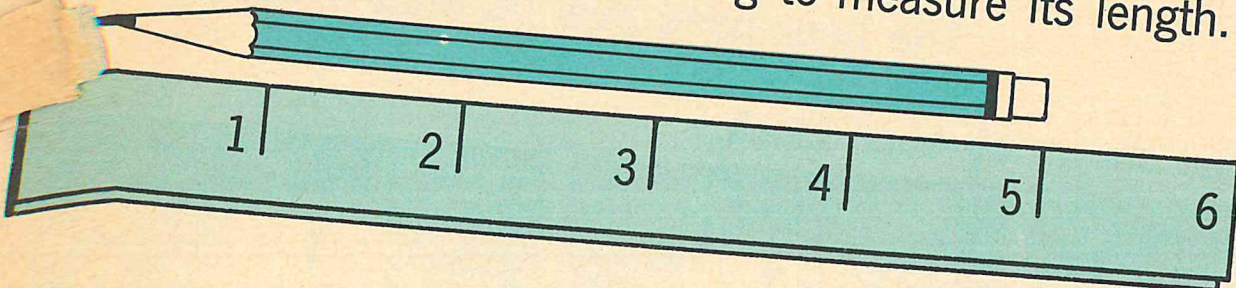
Half of 12 is

There are inches in half a foot.

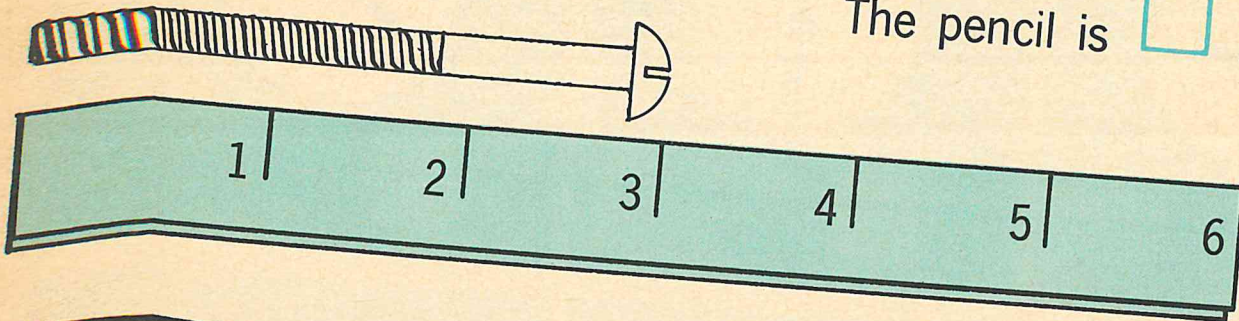
Here is a ruler that is half a foot long:



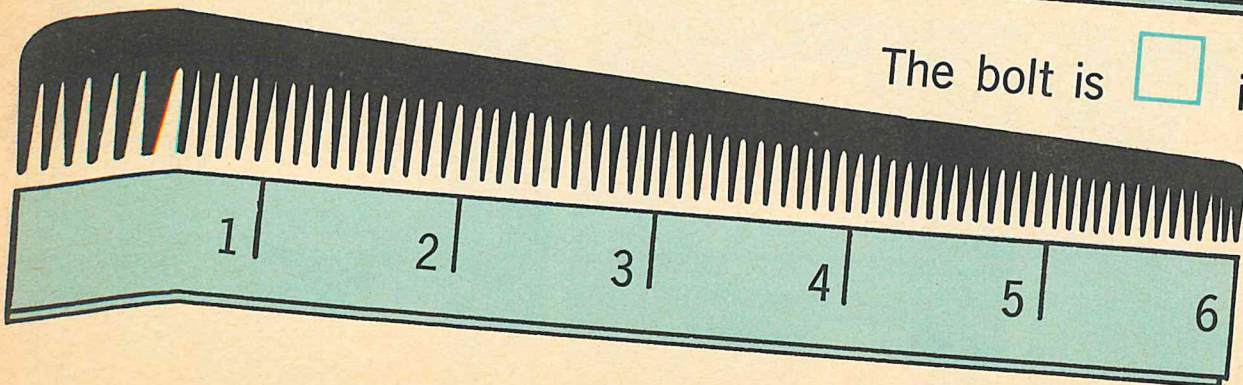
Use the ruler next to each thing to measure its length.



The pencil is inches long.



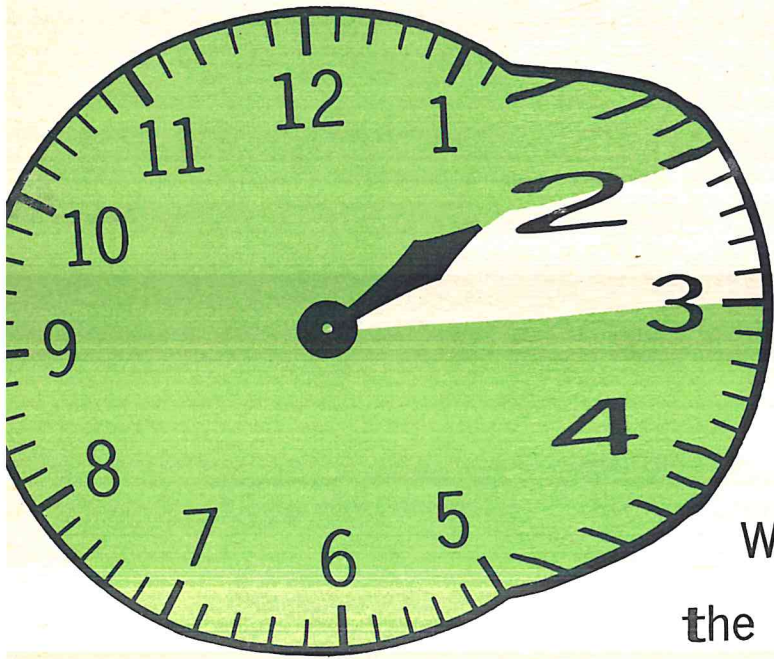
The bolt is inches long.



The comb is inches long.

Clock

The short hand on a clock **is** the hour hand. 
The long hand is the **minute** hand. 

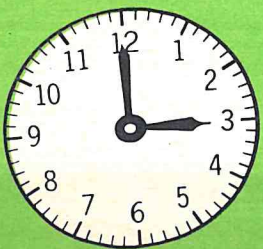


The hour hand turns this much
in one hour.

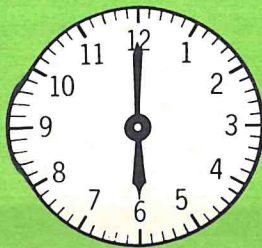
When the minute hand points to 12,
the hour hand tells us what time it is.

The hour hand tells us what o'clock it is.

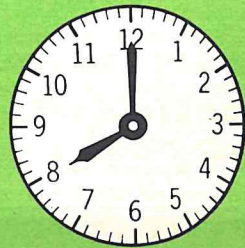
Write the time shown by each clock.



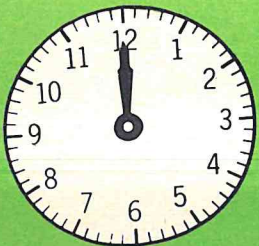
o'clock



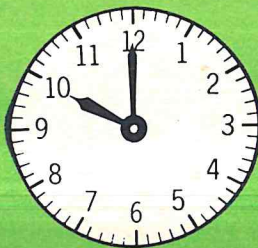
o'clock



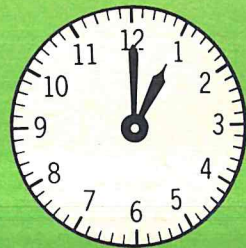
o'clock



o'clock



o'clock



o'clock

WORKBOOKS IN THIS SERIES

by Irving Adler, Ph.D.

MATHEMATICS—GRADE 1

What numbers mean • How numbers are written • What order numbers come in (or how to count) • How to add • How to subtract • How to compare sizes (or what **big**, **little**, **tall**, **small**, **more**, and **fewer** mean) • What **pennies**, **nickels**, and **dimes** are (or how to use pennies, nickels, and dimes) • How to make change • How to tell the hours on a clock • What a **foot ruler** is • What **triangles**, **squares**, and **circles** are • What order the days of the week come in • What a **dozen** is.

MATHEMATICS—GRADE 2

How to count up to 100 • How to add and subtract two-place numbers • How to work problems in your head • What **zero** means • What **half** and **fourth** mean • How to count money • What **quarters** are • How to read a thermometer • How to read a calendar • How to tell time in quarter hours.

MATHEMATICS—GRADE 3

More about adding and subtracting • How to multiply • How to divide • What **third** means • What **dollars** and **half dollars** are • How to use a dollar sign • More about calendars • More about thermometers • How to tell time at five-minute intervals • How to measure with a ruler.

MATHEMATICS—GRADE 4

How to count up to 100,000 • How to add and subtract three-place numbers • How to multiply a three-place number • How to divide a two-place number • How to write fractions • How to add and subtract fractions • More about thermometers • What **Roman numerals** are • How to work with money up to five dollars • How to use **inches**, **feet**, and **yards** • How to use **pints**, **quarts**, and **gallons** • How to use **pounds** and **ounces** • More about clocks and calendars.

MATHEMATICS—GRADE 5

What fractions are (what fraction means) • How to work with fractions • More about adding and subtracting • More about multiplying and dividing • More about Roman numerals • More about money • What **average** means • More about clocks and calendars (more about time) • More about weight • More about length.

MATHEMATICS—GRADE 6

How to count up to 100,000,000,000 • More about adding and subtracting • More about multiplying and dividing • More about fractions • What **mixed numbers** are • What **decimals** are • How to use decimals • How to work with **rate**, **time**, and **distance** • How to find **area** • How to find **perimeter** • How to find **volume** • More about Roman numerals • Some laws of arithmetic.

Name _____

IN THIS WORKBOOK, I WILL LEARN:



what numbers mean



how numbers are written

3

what order numbers come in (or how to count)



how to add



how to subtract



how to compare sizes { (or what big, little, small,
tall, more, and fewer mean)



what pennies, nickels, and dimes are { (or how to use pennies,
nickels, and dimes)



how to make change



how to tell the hours on a clock



what a foot ruler is



what a dozen is



what order the days of the week come in



what triangles, squares, and circles are

G O L D E N P R E S S

